CONSTRUCTION NEWS

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RAILWAYS.

Georgia.—Greene County R. R. Co.—This recently incorporated company proposes to construct a line to Good Hope and Monroe and later to extend the line through Greene County, Greensboro, White Plains and Sparta. Forest Green, Atlanta, Ga., is interested.

Georgia.—Valdosta, Moultrie & Western R. R. Co.—Surveys have been made and a part of the right of way secured for an extension from Moultrie to Fort Gaines. The total distance is about 100 miles and for 40 miles out of Moultrie the route has been selected running through the following towns: Funston, Bay, Sale City, Camilla to Newton. Frank Roberts is Pres. and Gordon Tillman, Ch. Engr., both of Valdosta, Ga.

Alabama.—Tennessee & Tombigbee R. R. Co.—This company has recently been incorporated to build a railroad from Red Bay to Mt. Hope, passing through Guntersville, Rockwood and Newburg.

Kentucky.—Kentucky & Tennessee State Line R. R. Co.—This company proposes to build a line along the Kentucky State line through Henry County. J. W. Williams and W. T. Jackson, Hazel, Ky., are interested.

Montana.—Gilmore & Pittsburg R. R.—This road has secured an entrance into Dillon and will build a line to Twin Bridge, about 50 miles, connecting with the Northern Pacific. Mr. J. J. Hill is supposed to be interested in this railroad.

✚**Arkansas.**—Missouri Pacific System. St. Louis, Iron Mountain & Southern Ry.—A contract has been awarded to the LIST & GIFFORD CONSTRUCTION CO., Kansas City, Mo., for grading a cut-off from Bridge Junction, Ark., opposite Memphis, Tenn., to Marianna, Ark., to form a direct route between Memphis and New Orleans. The Memphis-New Orleans line will be used by the Iron Mountain and the Frisco. B. F. Bush, Pres. of the Missouri Pacific, said the grading will be completed by Oct. 1.

Texas.—Since the reorganization of the Bartlett & Florence Ry., and the change of the name to the Bartlett & Western Ry., it has been announced that the road will be built from Jarrell to Florence, a distance of 12 miles. The right of way has been secured and part of the grading done.

Colorado.—In Weld County, the center of a new dry farming district, there promises to be much activity in railway building. The Union Pacific contemplates the extension of its Crow Lake branch north from Briggsdale, Colo., about 50 miles, joining the main line at Pine Bluff, Wyo. The Chicago, Burlington & Quincy R. R. is considering a branch from Hudson north to Greeley, about 30 miles.

Nevada.—Pioche-Pacific R. R. Co.—This company has been incorporated to construct a railroad between Pioche and Royal City, Lincoln County, Nev., about 12 miles. The officers are: Frank M. Foote, Pres.; E. A. Culbertson, Vice-Pres.; Fred R. Wooley, Secy. and Treas., all of Pioche, Nev.

✚**Washington.**—Great Northern Ry.—A contract has been let to COUGHREN & WALDSON to grade 25 miles of line down the San Poil Valley, from Republic. It is reported that the line will be built to Clark, the junction of the San Poil and Columbia Rivers, this year.

✚**Ontario.**—Canadian Northern.—Contracts have been awarded to the NORTHERN CONSTRUCTION CO., Winnipeg, and FOLEY BROS., St. Paul, for the construction of the main line between Sellwood Junction and Port Arthur, Ont., a distance of 551 miles. Work is to be started at once.

ELECTRIC RAILWAYS.

Shelburne Falls, Mass.—The Shelburne Falls & Colerain St. Ry. is making surveys on its extension from Colerain to Wilmington.

Worcester, Mass.—The Worcester Consolidated St. Ry. Co. has received a franchise to double track several of its lines in Worcester. J. F. McCabe, Springfield, Mass., is Pur. Agt.

Rochester, N. Y.—The Buffalo, Lockport & Rochester Ry. is considering plans to build an extension from its Church St. line, in Middleport, north on Harland St. to Main St., across the Erie Canal, with spurs to several mills and factories.

Elwood City, Pa.—A franchise has been received by the Beaver Falls, Koppel & New Castle St. Ry. from the City Council in Elwood City for the construction of an electric railway between New Castle, Koppel, Elwood City and Beaver Falls. J. S. Herron is interested.

Harrisburg, Pa.—The Central Pennsylvania Traction Co. contemplates the extension of its Ft. Hunter line to Dauphin. J. O'Connell is Purch, Agt.

Lebanon, Pa.—A charter will be made to build an electric railway between Campbelltown and Lebanon, via South Londonderry, South Annville and North Cornwall. Incorporators, M. S. Hershey, J. B. Leithiser, John B. Snyder, S. C. Stecher and F. B. Snavely.

Owego, Pa.—Preliminary arrangements are being made to build a 22-mile electric railway to connect Owego and Le Raysville via Warrenham, Warren Center, Wapaseening Creek, South Warren, Potterville and Ellis Creek Valley.

✚**Pittsburg, Pa.**—The contract for the construction of the 27-mile gasoline motor line between Evans City, Mars and Harmonville, by the Allegheny & Northwestern St. Ry., has been awarded to the McCOMB CONSTR. CO., Olean, N. Y. John Shaffer, Butler, Pa., is interested.

✚**Waynesburg, Pa.**—Contracts have been awarded by the Waynesburg & Blacksville St. Ry. Co. to F. H. STARK, Greensburg, Pa., and the GARDELIA CONSTRUCTION CO., for the construction of a new line 13 miles long, extending from Blacksville to Waynesburg.

Tacoma Park, Md.—A 35-year franchise has been received by the Baltimore & Washington Transit Company, Washington, from the Town Council in Tacoma Park to extend its tracks from the district line and Carroll Ave. to the Wasnington Sanatorium on the Maryland side.

Glenville, W. Va.—A 12-mile standard gage electric railway has been chartered by the Gilmer & Parkersburg Ry. Co. Robert L. Ruddell, Glenville, Gen. Mgr.

Rockmart, Ga.—Preliminary arrangements are being made to build a 10-mile electric railway extending through Rockmart. J. S. Davitee, Rockmart, is interested.

Waycross, Ga.—A 30-mile electric railway to connect Hebardville, Deenwood, Winona Park, Blackshear, Waresboro and Waycross has been contemplated. The incorporators are J. L. Cooper, A. M. Knight, J. L. Walker, Dan Lott, J. S. Williams, J. M. Cox, George W. Deen, T. H. Calhoun, L. A. Wilson, John W. Bennett and W. W. Lambdin.

Chattanooga, Tenn.—A franchise has been asked by the Chattanooga Ry. & Light Co. to extend its tracks on Highland Park Ave. and Vance Ave., in Chattanooga. E. D. Vance is Engr., Chattanooga. W. E. Boileau, Chattanooga, Tenn., is Gen. Mgr.

Delaware, Ohio.—The Columbus, Urbano & Western Electric Ry. has approved the appropriation of $50,000 for building a branch from the line of this company to the Girl's Industrial Home a few miles from this place.

Crown Point, Ind.—The Gary & Southern Traction Co. intends to extend its line to Cedar Lake, 3 miles, and Lowell, 9 miles, and eventually to Kankakee, 17 miles.

Indianapolis, Ind.—Bids will soon be asked for by the Chicago & Meridan Ry. to connect Indianapolis, Sheridan, Flora, Monticello, Francisville, Hammond and Warsaw. M. J. Moreland is Secy. Noted June 22.

New Castle, Ind.—The Indianapolis, New Castle & Toledo Ry. will award contracts in the near future for the construction of its extension from New Castle to Muncie.

✚**Battle Creek, Mich.**—The contract has been awarded to the J. T. ADAMS CONSTRUCTION CO., Columbus, Ohio, for constructing 28 miles of electric railway between Battle Creek and Coldwater for the Battle Creek, Coldwater & Southern Ry.

Champaign, Ill.—The appropriation of $45,000 has ben received for street railway improvement in Champaign by the Champaign Street Railway, Gas & Electric Supply Co. This work will include the building of a double track street railway in Urbana from the Flat Iron to the Court House. Work will begin about Sept. 4.

Chicago, Ill.—Chicago, Waukegan & Fox Lake Traction Co. will construct an interurban railway to connect Waukegan, Fox Lake and Woodstock. L. C. Roberts, Chicago, is Engr.

Chicago, Ill.—The Cicero & Southwestern Ry. has been organized to build an electric railway in the western suburbs of Chicago. Franchises will be asked for at once through the towns through which it will extend. Frank Hunt is Pres.

East St. Louis, Ill.—A franchise has been asked by the Alton & Southern R. R. to extend its track on certain streets in East St. Louis and to connect with the St. Louis & Belleville Electric Ry., C. B. Fox, East St. Louis, is interested.

Paynette, Wis.—A franchise has been received by the Chicago & Wisconsin Valley R. R. from the Village Board.

Webster City, Iowa.—A franchise has been asked by the Fort Dodge, Des Moines & Southern R. R. from the City Council.

✚**St. Paul, Minn.**—The St. Paul Southern Electric Ry. has awarded a contract to the HOY ELZY CO. for the construction of its line between Inver Grove and Hastings.

Dallas, Tex.—It is reported the Texas Traction Co. will begin construction at once on 2½ miles of track in Dallas. It is expected to extend this line to Bonham and McKinney.

Houston, Tex.—The City Council of Houston has granted a franchise to the Houston Electric Co. and the Galveston-Houston Interurban Electric Ry. Co. for the use of streets of this city for their proposed lines. The franchise also gives the two companies the right to enter into supplemental contracts with each other for the joint use of tracks in Houston. Both companies are managed by Stone & Webster, Boston, Mass.

San Benito, Tex.—The San Benito & Rio Grande Valley R. R. Co. is arranging to extend its gasoline motor line to Brownsville. It has obtained the right of way for the proposed extension that it will construct to Santa Maria. Sam Robertson, San Benito, is Pres. and also has charge of the construction work.

Nampa, Idaho.—Construction will soon be started on an electric railway between Nampa and Caldwell. W. E. Pierce, Boise, is the promoter of this line.

Wenatchee, Wash.—A franchise has been received by the Wenatchee Traction Co., for an electric railway in Wenatchee. Louis W. Pratt is Pres. Noted May 18.

Salem, Ore.—A franchose has been granted by the Portland Railway, Light & Power Co. from the City Council to extend its lines on Nebraska St. and Belmont St., in Salem.

Redwood, Cal.—A franchise has been received by Edward S. Fitzpatrick from the Board of Trustees to build an electric railway from Redwood City to Woodside.

San Bernardino, Cal.—The Pacific Electric Ry. Co., of Los Angeles, contemplates the construction of an extension betwen San Bernardino and Rialto, five miles and probably on Ontario, 20 miles. George E. Phillsburg, Los Angeles, is Engr.

Woodland, Cal.—A franchise has been received by the Vallejo & Northern R. R., Vallejo, to extend its line on Main St. from the eastern to the western town limits of Woodland.

Riverport, N. S.—Plans have been made for the construction of a 12-mile electric railway by T. G. Nichols, between Lunenburg and Riverport, with a spur to Park Creek.

LIGHT AND POWER PLANTS.

(✚Denotes that this work is advertised in Engineering News.)

✚**Albany, N. Y.**—The State Trustees of Public Buildings have awarded to GILLIS & GEOGHEGAN, 537 West Broadway, New York, the contract for the steam equipment for the capitol power-house and the steam and return connections between the power-house, capitol and state education building, at $202,083. The LORD ELECTRIC CO., 213 West 40th St., New York, has secured the contract for the electric equipment and connections between the buildings at $95,200.

✚**Buffalo, N. Y.**—The City of Buffalo has let general contract to CHARLES A. HAGER, Perrysburg, N. Y., for erection of power plant for the J. N. Adam Memorial Tuberculosis Hospital.

New York, N. Y.—Bids will be received by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education until 3 p. m., July 31, for installing electric equipment in Washington Irving High School, on the easterly side of Irving Pl., 16th and 17th Sts., Boro. Manhattan; for installing electric equipment in new Public School 168, on the westerly side of Throop Ave., between Bartlett and Whipple Sts., Boro. Brooklyn; and for item 1, installing heating and ventilating apparatus and item 2, installing temperature regulation in new addition of Boys' High School, on Madison St. and Putnam Ave., west of Marcy Ave., Boro. Brooklyn.

✚**Swarthmore, Pa.**—The contract has been let to WILLIAM PROVOST for the construction of a power plant, 61 × 176 ft., for Swarthmore College, at $75,000.

Washington, D. C.—Bids will be received until Aug. 1 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for furnishing lamp standards and brackets that may be required for various buildings.

Danville, Va.—The Danville Water Power Co. has been incorporated with R. A. James, Pres., H. S. Lanier, Secy., and Treas., and others of Danville, to develop water power. The capital is $50,000.

Edgefield, S. C.—Bonds for $15,000 have been sold for the installation of a municipal electric light plant. Bids for construction will soon be asked by the Town Trustees.

Toccoa, Ga.—The Appalachian Power Co., with main offices in Toccoa, and a capital of $250,000, has been granted a charter. The incorporators are: Louis B. Magid, of Tallulah Falls, Ga.; William Hurd Hillyer, of Atlanta, Ga., and D. S. Wommack, of Toccoa, Ga. The company plans to develop about 3,200 HP.

Demopolis, Ala.—Bids were received as follows on July 13, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for furnishing light fixtures at Demopolis, and other places: David J. Braun Mfg. Co., Chicago, Ill., $12,512; Strosberg Co., Newark, N. J., $12,468; Gas Fixtures & Brass Co., Cleveland, Ohio, $12,589; Reading Chandelier Works, Reading, Pa., $12,000.

Tuscaloosa, Ala.—An application has been made to the Council by T. G. Blair and H. B. Foster for a franchise to construct and operate an electric light plant in Tuscaloosa.

Lafayette, La.—The City Council has authorized the installation of two Diesel engines in the municipal power house. Estimated cost, $40,000.

Cincinnati, Ohio.—Bids will be received by the Clerk of the Board of Education, City Hall, until noon, July 31, for electric fixtures for the 23d District School and the Winton Pl. Public School.

Cleveland, Ohio.—Bids will be received by A. B. Lea, Dir. Pub. Ser., City Hall, until noon, July 25, for furnishing and delivering electric meters for the municipal light plant. Specifications are on file at the office of the Superintendent of the Water Department, Ira Hoffman, Secy.

✚**Columbus, Ohio.**—W. C. Kennedy, Custodian, Federal Bldg., has awarded the contract for lighting 2,000 lights in the new Government building at State and Third Sts., to the COLUMBUS RY. & LT. CO. L. G. White, Gen. Supt.

✚**Terra Haute, Ind.**—The Terra Haute, Indianapolis & Eastern Traction Co., of Terra Haute has awarded contracts to the GENERAL ELECTRIC CO. of Schenectady, N. Y., for two 300 KW. rotary convertors, 15 100 KVA. transformers and a switchboard.

Wakarusa, Ind.—A franchise has been granted to the Electric Light & Power Co., by the Council for the installation of a plant.

Trowbridge, Mich.—The Commonwealth Power Co. is making preparations to rebuilt its plant, recently destroped by fire.

✚**Chicago, Ill.**—The Western Electric Co. submitted the lowest bid to the city on July 6 for furnishing and installing two turbo-generator sets at the 68th St. pumping station at $6,975.

Gibson, Ill.—The Central Electric Light, Heat & Power Co., of Gibson, has been incorporated, with a capital of $100,000, to operate a heat, light and power plant. The incorporators are: A. Hood and H. L. Clarke.

Loda, Ill.—The Paxton Electric Co., of Paxton, Ill., will erect a transmission line from its power house to Loda and will supply electricity to light the village.

Virginia, Ill.—The installation of a new street lighting system is being contemplated by the Virginia Light, Heat & Power Co.

Waverly, Iowa.—Bids will be received in about two or three weeks for extending race wall and excavating race of water power plant, owned by the city of Waverly. The work will include a reinforced concrete-wall 300 ft. long, 250 yds. channel excavation, 2,500 yds. loose rock in water. Ralph B. Slippy, of Waterloo, Iowa, is Engr.

Fort Scott, Kan.—The contract has been awarded by the Atlas Coal Co., for the construction of an electric light and power plant at its mine at Rich Hill. The proposed plant will supply electricity for lighting and operating the machinery in the mines.

Minneapolis, Kan.—The citizens have voted to issue $15,000 of bonds to construct an electric light plant. O. E. Griest is City Clk.

Bethany, Mo.—Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo., are preparing plans for electric light improvements here. J. C. McClure is City Clk.

Morrilton, Ark.—The Morrillton Light & Power Co. is making preparations for the installation of an adtional generating unit consisting of a 150-KW. alternator and Corliss engine. This company will supply electricity to operate a large cotton gin plant which is to be located near by. Judge W. L. Moose is Pres.

✚**Austin, Tex.**—It is reported that the proposal of WILLIAM D. JOHNSON of Hartford, Conn., and New York, for the construction of a dam across the Colorado River here and the installation of a hydraulic plant has been accepted by the City Council and a contract entered into, subject to ratification by referendum vote by the people of the city. The total proposed consideration is $1,600,000, to be paid in 25 annual instalments.

New Braunfels, Tex.—The taxpayers have voted to issue $67,000 of bonds for the construction of a dam across the Guadalupe River here and for other improvements. A hydroelectric plant and water-works pumping station will also be installed at the dam.

Sentinel, Okla.—All bids have been rejected by the town for equipment for the electric light plant. The city will buy material and purchase equipment. F. Murch & Co. are Engrs., Clinton, Okla.

Fruita, Colo.—The City Council is considering the installation of a power plant in the South Side ditch, south of Fruita, and for the entire lower end of Grand Valley.

Alberquerque, N. Mex.—Plans are being prepared by H. Von Schon, of Detroit, Mich., for the construction of a large hydroelectric power plant on the Gila River, in Grant County. The proposed plant will supply electricity for the mines and mills in the Mogollon mining district.

La Cruces, N. Mex.—Bids will be received by the U. S. Reclamation Service, Washington, D. C., until 2 p. m., July 21, for furnishing and delivering at works of bidder three cableways, span for each about 1,420 ft.; stationary towers, tops of head and tail towers at practically same elevation; head or hoist tower about 70 to 80 ft. high with engine inside of base tower; tail tower 125 ft. high. Cableways designed to operate Andresen-Evans type B 3-yd. heavy weight grab buckets weighing 10,000 lbs. each, buckets to be furnished by the United States; cableways equipped with aerial dumping devices. Average load in handling concrete, eight tons; maximum load, 15 tons; load speed, 200 ft. per min. in hoisting and 800 ft. in conveying; cable hoists to be electrically operated with 3-phase 60-cycle 2,200-volt alternating current, each hoist complete with 300-HP. crane type motor with master control equipment and resistance; main cable, 2½ ins. in diameter; hoisting and conveying ropes, ¾-in. in diameter. F. H. Newell is Dir.

Fallon, Nev.—The United States Government is considering plans for the construction of a large electric-light plant at the new Lahonton dam for the purpose of supplying electricity to operate the gates and dams of the large Truckee-Carson project and for operating the electrical pumps to drain the Carson Lake.

Port Orchard, Wash.—Bids will be received until July 24 by the State Board of Control, Olympia, for constructing a power-house and installing a power and heating plant at the Washington Veterans' Home, Port Orchard.

Los Angeles, Cal.—Bids will soon be asked for the erection of an electric fountain 60 ft. in diameter in Los Angeles to cost about $5,000.

Sacramento, Cal.—Willis Polk, Arch., Merchants Exchange Bldg., San Francisco, Cal., has prepared plans for the construction of a 1 and 2-story concrete power station for the San Francisco Gas & Electric Corporation. Estimated cost, $70,000.

San Bernardino, Cal.—The California-Nevada Power Co. has applied for a franchise in San Bernardino County to construct and maintain power lines along the county highways. Similar application has also been made in Riverside County. The company, it is reported, has extensive power rights in Inyo County, and supplies a large territory in California and Nevada and is incorporated for $15,000,000. The company will expend $300,000 in this and Riverside County at once if the desired franchises are obtained.

San Diego, Cal.—The San Diego Consolidated Gas & Electric Co. will expend $75,000 at once in the construction of conduits in various streets to carry power lines. R. L. Clarke is Supt., San Diego.

Sawtelle, Cal.—Bids will be asked soon for 2,000 ft. of 12-in. conduit to carry 3-in. steam line and 2-in. water line between power house and Ward Building, National Soldiers' Home, Sawtelle.

Welland, Ont.—The Town Council has commissioned an expert to put a valuation on the plant of the Welland Electric Co., which the town proposes to purchase and operate as a municipal plant.

Penticton, B. C.—Bids will be received by F. H. Latimer, Penticton, until 8 p. m., Aug. 10, for the supply of all materials and labor in connection with the installation by the municipality of Penticton, of two 100-KVA., 3-phase, 4,600-volt, 900 r. p. m., alternating-current generators, direct connected to impulse wheels operating at 2,045 ft. effective head; pressure pipe line of about one mile of 10-in. and one mile of 12-in. pipe, switchboards, transformers, meters, distribution and street lighting system. Plans and specifications may be seen at the offices of F. H. Latimer, Consult. Engr., Penticton, and Mather, Yuill & Co., Ltd., Vancouver.

Zimapan (Hidalgo), Mex.—Andrew Mackenzie, of Mexico City, has been granted a concession by the State Government of Hidalgo, for the installation of a large hydroelectric plant and the construction of transmission lines to run to this mining district and other industrial centers of the state. The concession authorizes him to use the waters of the Moctezuma and Tula Rivers for generating the electric power.

BRIDGES.

(✚*Denotes a contract awarded.*)

Boston, Mass.—Bids will be received by the Public Works Department until July 25 for repairing the draw pier at Dorchester Ave. bridge. L. K. Rourke is Comr. of Pub. Wks.

***Hartford, Conn.**—Bids will be received by the Board of Contract and Supply until 11 a. m., July 31, for the construction of a steel bridge over Park River. The estimated cost is $5,000. Joseph Buths is Secy.

***Massena, N. Y.**—We are officially advised that bids for constructing a bridge over Raquette River were received by the Town Board on July 15, as follows: A. F. Nims, Philadelphia, N. Y., $30,375; James McGroty, Massena, N. Y., $28,500; Dale Engineering Co., 249 Genesee St., Utica, N. Y., $32,480; T. N. McLeod, 90 West St., New York, $39,350; William T. Field, The Rothstock, Watertown, N. Y., $29,578. All the bids were rejected, and bids on revised plans will be received until 1 p. m., Aug. 5. Plans will be on file with B. S. O'Neill until after July 28.

Butler, Pa.—Bids will be received by the Board County Commissioners, J. C. Kiskaddon, Chn., until July 28, for constructing the superstructure of the Hartzell Bridge over branch of Slippery Rock Creek, Slippery Rock Township.

Harrisburg, Pa.—Bids will be received by the Highway Commissioners until noon, July 24, for constructing a reinforced-concrete or steel girder plate, two-span viaduct, 120 ft. in length and 28 ft in width. The bridge will cost approximately $35,000 to be divided equally between the city and the Philadelphia & Reading Ry. Co. W. W. Caldwell is Comr.

✚**Meadville, Pa.**—The County Commissioners have awarded a contract for constructing a concrete bridge over French Creek at Mead Ave., to the FERRO CONCRETE BRIDGE CO., Harrisburg, Pa., at $21,283.

Pittsburg, Pa.—Bids will be received by the Commissioners of Beaver County, until noon, July 20, for constructing a bridge over Sewickly Creek on the Allegheny-Beaver County line. The bridge will be a steel truss 75 ft. span, carried on concrete abutments and concrete foundations. R. J. Cunningham is County Contr.

Wilmington, Del.—James Wilson, County Engr., has presented plans for the proposed iron lift bridge to replace Third St. bridge across the Christiana River. The plans call for a 150-ft. span, and the new bridge will be built so that two-thirds of the south approach of the present bridge will be used, the end of the bridge being south of the Baltimore & Ohio railroad slip. The approach of the Wilmington end will begin at the Fourth St. crossing of the elevated railroad and will go diagonally across the Church St. park land, the property of the Pennsylvania R.R. Co.

King George, Va.—Bids will be received by the County Board of Supervisors, F. C. S. Hunter, Clk., until July 24, for constructing a steel bridge with concrete abutments and pedestals, over Lambs Creek. The structure will have a central span, 30 ft. long, and two side spans, each 16½ ft. long. Bids will be received as a whole or separately for the substructure and superstructure. Plans are on file with the Clerk of the Circuit Court, King George, and with P. St. J. Wilson, State Highway Comr., Richmond.

Baxley, Ga.—The Counties of Appling and Toombs are considering the construction of a bridge across the Altamaha River, to cost $40,000. The location has not been definitely decided upon.

Meridian, Miss.—We are officially advised that the plans prepared by the railroad engineers for a viaduct at 25th Ave., to cost $150,000, have been rejected. W. G. Wetmore is City Engr. Noted on July 6.

New Orleans, La.—We are officially advised that plans are being prepared and bids will soon be asked for the construction of a 60-ft. clear span bascule bridge over the Old Basin Canal, at Hagan Ave. The Strauss Bascule Bridge Co., Fort Dearborn Bldg., Chicago, are Consult. Engrs.

***Benton, Tenn.**—Bids will be received at the Court House until noon, Aug. 5, for constructing a highway bridge across the Hiawassee River at Reliance, Tenn. J. N. McBrayner is Chn. and Chas. E. Johnson, Secy. of the Committee.

Ashland, Ohio.—Bids will be received by the Commissioners of Ashland County, until noon, Aug. 2, for constructing the England Station bridge, the Ora Glenn bridge, and others. The bridges will be of steel, with concrete floor, and stone or concrete abutments. Wm. Shidler, F. P. Stine and George W. Walter, are County Comrs., and Lotta Westover, Clk. of Bd.

Cambridge, Ohio.—Bids will be received by the Commissioners of Guernsey County until noon, Aug. 8, for constructing a bridge, 132-ft. span, over Wills Creek in Cambridge Township. W. D. Deselm is County Audr.

Celina, Ohio.—Bids will be received by the Commissioners of Mercer County, until 10 a. m., July 27, for constructing a 60-ft. steel bridge over the Blackcreek Ditch, Section 34, Blackcreek Township. J. L. Morrow is County Audr.

Steubenville, Ohio.—Bids will be received by the Commissioners of Jefferson County, until noon, Aug. 8, for constructing the sub-structure of Bridge No. 17, Knox Township. Sherman M. Floyd is Clk.

✚**Fort Wayne, Ind.**—We are officially advised that bids for constructing a reinforced-concrete arch bridge with two 105-ft. spans over the St. Joe River at Fort Wayne, according to plans prepared by A. W. Grosvenor, Bank Block, were received on July 12, as follows: LA FAYETTE ENGINEERING CO., Lafayette, Ind., Plan A, $38,000 (awarded contract), Plan B $40,000, Plan C, $35,800; Beers-Offut Construction Co., Fort Wayne, $38,000, $33,500; National Concrete Co., Indianapolis, Ind., County plans, $37,500, Plan A $38,500, Plan B $39,900, Plan C $37,500; Hackerdorn Contr. Co., Indianapolis, County plans, $34,000, own plans $25,600, $27,164, $32,872, plus extras. Attica Bridge Co., Attica, Ind., steel span including aboutments $30,000.

✚**Indianapolis, Ind.**—We are officially advised that the contract for constructing a bridge at Roach Ave. was awarded on July 10, to the AMERICAN CONSTRUCTION CO., 1201 East Georgia St., Indianapolis, at $7,190. The Hackedorn Contracting Co., Indianapolis, bid $7,491. Noted July 6.

Indianapolis, Ind.—The Commissioners of Marion County are asking bids for the construction of a bridge near Acton. The structure will be of concrete. Estimated cost $20,000. Albert Sahm is County Audr.

Shelbyville, Ind.—The Commissioners of Shelby County have appropriated $10,000 for the construction of the Franklin pike bridge over Flat Rock River. Bids will be asked as soon as plans are completed.

Mishawaka, Ind.—Bids will be received by the Board of Commissioners of St. Joseph County until 10 a. m., July 26, for constructing a bridge over the river at Logan St. John W. Harbou is County Audr.

✚**Indianapolis, Ind.** — A contract for constructing a reinforced-concrete bridge has been awarded to the R. F. PICKENS CONSTRUCTION CO., at $9,683. F. C. Luigenfelter is Engr.

Saginaw, Mich.—A Special Committee has been appointed to prepare plans for a bridge at Johnson St., the cost not to exceed $85,000.

Chicago, Ill.—Plans are being prepared by Waddell & Harrington, Kansas City, Mo., for the following vertical lift bridges over the Calumet River at South Chicago: A four-track skew truss span for the Lake Shore & Michigan Southern Ry. The bridge will be 210 ft. long with a clear waterway of 140 ft. and a vertical lift of 120 ft. above water level, the substructure to be cement caissons resting on rock. Samuel Rockwell, Cleveland, Ohio, is Ch. Engr. for the Ry.; two bridges for the Pennsylvania Ry. Co. The two bridges will be double track 210-ft. skew truss apans with a clear waterway of 140 ft. and a vertical lift of 120 ft. above water level, the substructure to be concrete caissons to bed rock. J. C. Bland, Pittsburg, Pa., is Engr. of Bridges for the railway.

Metropolis, Ill.—Bids will be received at the Court House, Metropolis, until 10 a. m., Aug. 5, for constructing two 40-ft. bridges in Massae County. Geo. C. Schneeman, Metropolis, is County Clk.

Pekin, Ill.—Bids will be received at the Court House, Pekin, until 2 p. m., July 22, for the construction of a 50-ft. reinforced-concrete bridge in Groveland Township, Tazewell County, R. F. Brecher is Town Clk.

Timewell, Ill.—Bids will be received at the State Bank, Timewell, until 2 p. m., Aug. 5, for the construction of a reinforced concrete bridge in Lee Township, Brown County. William M. Robinson, is Town Clk.

Kansas City, Mo.—Bids will soon be received for the construction of a reinforced concrete bridge for the city of Kansas City, Mo., to cost about $25,000, open spandrel construction, floor supported by cross girder resting on columns supported on four arch ribs.

Houston, Tex.—The City Council has awarded the contract for the construction of the Main St. viaduct to the WILLIAM P. CARMICHAEL CO., St. Louis, Mo., at $305,900. [illegible] construction will start about August 1[illegible]. The structure will be of reinforc[illegible] concrete. Noted July 13.

Beaumont, Tex.—The [illegible]amber of Commerce is promoting th[illegible] erection of a new steel bridge acro[illegible] the Neches River. The matter is [illegible]w before the Board of County Co[illegible]ssioners.

Redding, Cal.—We are [illegible]ficially advised that the contract for [illegible]nstructing a steel and concrete wagon [illegible]ridge over Fall River at Fall River Mills, was awarded on July 10, to [illegible] L. SCAMMAN, at $7,980. The [illegible]ner bidders were: Wm. Stephens, $[illegible]2; Florin Bros., $10,250; Peterson [illegible]nstruction Co., $8,450; Healy-Tibbit[illegible] Construction Co., $10,535. Noted [illegible]e 29.

Rudly, Cal.—We are [illegible]ficially advised that the Atchison, Topeka & Santa Fe Ry., will cons[illegible]t a steel bridge on concrete pier[illegible] with steel viaduct approaches, for [illegible] crossing at Kings River, Rudly. [illegible] C. Phillips, Los Angeles, is Ch. Engr. [illegible] the Coast Lines.

✚**Santa Barbara, Cal.** Bids have been received by the Board of Supervisors for the construction of a reinforced concrete bridge at the San Lucas Crossing over the Santa Ynez River as follows: CHAS. W. DEACON, San Louis Obispo, Cal., $33,000 (awarded contract); P. A. Howard & Co., Frost Bldg., Los Angeles, $43,[illegible]; Young Construction Co., Los Angeles, $44,860; S. M. Kerns Construction Co., Los Angeles, $54,000.

Santa Barbara, Cal.—The Board of Supervisors has directed the County Surveyer to make a survey for a bridge to cross the Ventura River in connection with the construction of the Rincon Road, to extend along the coast from Santa Cruz County to Ventura County. Estimated cost, $50,000.

Sacramento, Cal.—The folowing bids have been received by the Board of Supervisors of Sacramento County for the construction of the American River Bridge: Rose Construction Co., $24,642; Murphy-Elwell Co., $25,600; Clark & Henery, $27,500; Jenkins & Wells, $26,468; Hyde, Hodges & Co., $26,544; Cotton Bros., $27,600; Burrell Bridge & Construction Co., $27,945; Missouri Bridge Co., $30,960; Ely Tibbetts Construction Co., $33,400; Clarence W. Swain, $33,500; Thompson Bridge Co., $34,500.

Trail, B. C.—We are officially advised that bids will soon be asked for constructing a highway bridge at Trail according to plans prepared by Waddell & Harrington, 1012 Baltimore Ave., Kansas City, Mo. The structure will be composed of four through-truss riveted spans, each 170 ft. long, and will have an 8-ft. roadway and steel cylinder piers. J. E. Griffith, Victoria, B. C., is Engr., Pub. Wks.

BUILDINGS.

(**Denotes that this work is advertised in Engineering News.*)

Portland, Me.—A 7-story apartment block is about to be erected for Charles A. Plummer, to be of brick and steel, 30 × 105 ft., to cost $75,000. Frederick A. Thompson, 163 Free St., is the Arch.

✚**Boston, Mass.**—The contract for the Aquarium Building at City Point has been awarded to the CARROLL CONSTRUCTION CO., Brookline, at $94,218. R. S. Peabody is Chn. Park Comn. Noted June 29.

A 62-apartment block is proposed on Algonquin St., Dorchester. It is to be four stories, brick, 160 × 130 ft., and to cost $150,000. To be built for John L. Tufts. Prescott & Sidebottom, 12 Pearl St., are the Archs.

A theatre to cost $100,000 is to be built on Washington at Boylston St. C. H. Blackall, 20 Beacon St., is the Arch.

***Richford, Vt.**—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until Aug. 14 for the construction complete, including plumbing, gas piping, heating apparatus, electric conduits and wiring, of the U. S. post-office and custom house at Richford, Vt. Drawings and specification may be obtained from the Custodian of site at Richford, Vt., or at the discretion of the Superv. Arch.

Brookline, Mass.—A large addition to Hampton Court Hotel, to contain 100 rooms, on St. Paul St., is projected at an early date. Fred M. Crosby is the owner.

✚**Lincoln, Mass.**—The contract for the memorial building at Stackpole Farm has been awarded to R. D. DONALDSON; to cost $50,000, brick and stone, 150 × 45 ft. Matthew Sullivan, Boston, is the Arch.

Milford, Mass.—Bids were received as follows on July 12, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Milford, Mass.: (a) granite, (b) deduction for limestone, (c) for sandstone. Westchester Engineering Co., New York, (a) $65,700; (b) $8,492; (c) $7,110; Merrick Fireproofing Co., New York, (a) $75,200, (b) $7,991, (c) $3,650; William H. Fissell & Co., New York, (a) $74,800, (b) $10,000, (c) $8,000; King Lumber Co., Charlottesville, Va., (a) $69,000, (b) $10,000, (c) $7,000; Conners Bros. Co., Lowell, Mass., (a) $76,300, (b) $9,500, Ambrose R. Stannard, New York, (a) $69,000, (b) $8,500, (c) $7,100; Woodbury & Leighton, Boston, (a) $64,940, b) $10,257; H. Merritt Wallis, Beverly, Mass. (a) $74,000; (b) $15,732, (c) $14,163; James A. Monroe, Attleboro, Mass., (a) $67,142, (b) $2,500, (c) $2,000.

Nahant, Mass.—The following bids were received for the erection of the Town Hall: Shawmut Construction Co., $61,700; McGahey & O'Connor, $66,731; Woodbury & Leighton, $72,935; Broom Bros., $74,441; J. Nicholson & Son, $77,670; Strout Bros. Co., $78,000; C. S. Cunningham Sons Co., $78,637; Whiton & Haynes, $78,900; Arthur H. Vinal is Arch.

Northampton, Mass.—Bids are now being received for a college building for the Clark School for Deaf and Dumb, to cost $50,000. Lincoln & Fechreimer, Fifth and Race Sts., Cincinnati, Ohio, are the Archs.

✚Walpole, Mass.—The contract for the St. Francis Church has been awarded to JOSEPH DOLAN, 95 Milk St., Boston; to cost $50,000, to be of brick, stone and terra cotta. Matthew Sullivan, Boston, is the Arch.

✚Westfield, Mass.—The contract for the new theater on Elm St. has been awarded to H. C. WOOD & CO. J. W. Foster, of Springfield, is the Arch.

✚Providence, R. I.—The contract for the nurses' home at Butler Insane Hospital has been awarded to WILLIAM WILLIAMS. This is to be 158 x 34 ft., brick, three stories. Contracts for plumbing, heating and electrical work will soon be awarded. Jackson & Robertson, 75 Westminster St., are the Archs.

Woonsocket, R. I.—The contract has been awarded to the EASTERN CONSTRUCTION CO., Woonsocket, for the erection of two freight houses. The N. Y., N. H. & H. R. R. is the owner.

Wallingford, Conn.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until August 29, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures), of the U. S. post-office, Wallingford, Conn. Drawings and specification may be had from the Custodian of site at Wallingford, Conn., or at the discretion of the Superv. Arch.

Albany, N. Y.—The following bids were received on July 17 by the Board of Contract and Supply for the construction of the high school here. For the whole work they were: Peter Keeler Building Co., Albany, N. Y., $675,399, 539 days; R. T. Ford Co., Rochester, N. Y., $690,000, Sept. 1, 1912; A. E. Stephens Co., New York City, $725,275, 500 days; George A. Fuller Construction Co., New York City, $742,000, 300 days; Raymond M. Booth, Albany, $690,000, 450 days; Collins Bros., Albany, $660,000, 525 days.

Bids for the general construction, without plumbing, heating and or electric wiring, were submitted as follows: Morris Kantrowitz, Albany, $490,000; Feeney & Sheehan Co., Albany, $499,262; A. Pasquini, New York City, $548,888.

Bids submitted for plumbing alone as follows: Edward Joy Co., Syracuse, N. Y., $28,800; Francis Bros. & Gillette, Philadelphia, Pa., $45,500; Francis Bros. & Gillette, Philadelphia, Pa., $94,000 (for heating); Francis Bros. & Gillette, Philadelphia, Pa., $41,360 (for wiring); A. J. Eckert, Philadelphia, Pa., $36,985 (for plumbing).

Bids for heating alone were received as follows: John W. Danforth Co., Buffalo, N. Y., $107,000; Storms & Co., Newark, N. J., $97,500; James Hunter Heating & Contracting Co., Albany, $90,216; Silles & Geoghan, New York City, $87,742; W. B. Armstrong Co., Albany, $121,264.

For electric wiring alone: Frost & Sheldon, Albany, $34,850.

All bids were rejected and the architects, Starrett & Van Vleet, New York, were directed to readjust their specifications so as to bring the cost of the proposed new structure within the appropriation.

✚Buffalo, N. Y.—Contracts have been awarded for the construction of a modern store and office building on the site of the Boardman building, destroyed by fire last February. The building will be a fireproof five-story structure, will face on both River and Fulton streets, with store at the junction, another on River St., and a third on Fulton St. The building will be of steel construction with light gray brick and white stone frontage and will be equipped with freight and passenger elevators. The contracts were awarded as follows: Mason Work, JOHN N. EDWARDS; carpenter work, GEORGE SPENCE, JR.; roofing and metal work, THE EDWARD MANOGUE CO.; plumbing and steam fitting, J. J. HORAN; iron and steel work, THE IRVING IRON CO., L. I. City; painting, E. R. WALES; marble and tileing work, THE CONROY MARBLE & TILE CO.; electrical work, THE HINSDELL ELECTRIC CO.; elevators, THE COHOES IRON FOUNDRY CO.

Buffalo, N. Y.—Esenwein & Johnson, 781 Ellicott Square Bldg., are preparing plans for a lodging house, 60 x 100 ft., 4-story and basement, brick and steel fireproof, to be erected at Delaware Ave. and Eagle St. by the County of Erie. Theo. Koehbell is Chn. Com. on Charitable Institutions.

City Arch. Howard L. Beck, Municipal Bldg., has plans in progress for an 8-room addition to Public School No. 42 at Moselle and Urban Sts., to be 2-story and basement, stone, brick and structural steel.

The Buffalo General Electric Co. has let contract for construction of its 17-story office building at Genesee, Washington and Huron Sts. to JOHN GILL & SON, Cleveland, Ohio, at approximately $450,000. Steel frame, stone, brick and terra cotta. Archs. Esenwein & Johnson, 781 Ellicott Square Bldg., prepared plans.

Arch. Robt. A. Wallace, Builders' Exchange, is revising plans for the Hutchinson High School at Elmwood Ave. and Johnson Park, bids recently received having exceeded the estimates about $100,000. The aggregate having been about $650,000. Geo. Schaaf & Sons, 547 East Utica St., were low bidders for masonry. Otis & Sons Engineering Co., Ellicott Square Bldg., for heating and ventilation. C. A. Criqui, 926 Main St., plumbing and McCarthy Bros. & Ford, 41 East Eagle St., electrical work.

Ithaca, N. Y.—Bids were received as follows by E. L. Williams, Treas. Cornell University, Ithaca, on July 5, for the entire work comprised in three fireproof buildings for the New York State College of Agriculture at Ithaca: Eastern Concrete Steel Co., Buffalo, N. Y., $264,352; Durolithic Co., Buffalo, N. Y., $266,000; Metz Bros. Co., Buffalo, N. Y., $269,500; L. A. Burke & Sons Co., New York, N. Y., $275,000; C. H. Everitt, Buffalo, N. Y., $279,000; Morris & Allen, Buffalo, N. Y., $286,212; Wills & Marvin, New York, N. Y., $296,977; R. T. Ford Co., Rochester, N. Y., $301,900; Driscoll Bros., Ithaca, N. Y., $306,750; Geo. A. Fuller Co., New York, N. Y., $316,000; R. Richards & Son, Utica, N. Y., $324,184. Plans were prepared by Green & Wicks, Archs., 110 Franklin St., Buffalo, N. Y.

Long Island City, L. I., N. Y.—Plans have been prepared by Thompson & Frohling, 114 East 28th St., New York City, for the construction of a warehouse and office building on Jackson Ave. The estimated cost is $700,000.

New York, N. Y.—Plans have been completed by Louis E Jallade, 37 Liberty St., for the construction of a fireproof church at Broadway and 114th St. The Fourth Avenue Presbyterian Congregation is owner. The estimated cost is $200,000.

Plans have been completed by J. M. McVerona, 13 Park Row for the construction of a 2-story brick stable and garage for the New York City Department of Water Supply. The cost is about $50,000.

Plans are being prepared by Rouse & Goldstone, 38 West 32d St. for the construction of a 12-story apartment building on West End Ave., between 96th and 97th Sts. I. Randolph Jacobs, 160 Broadway is the owner.

Plans have been prepared by Charles B. Meyers, 1 Union Sq., for the construction of a 6-story tenement building at 19-21 Christopher St. Lipman & Root, 481 West 159th St. is owner. The cost is $40,000.

Plans are being prepared by Rouse & Goldstone, 38 West 32d St., for the construction of a 9-story apartment building at 316-318 West 87th St. The cost is about $200,000.

Plans are being prepared by Albert J. Bodker, 25-27 West 32d St. for the construction of a 12-story apartment building at 383-387 Park Ave. The Montana Realty Co, 135 Broadway is the owner. The estimated cost is $350,000.

✚The contract has been awarded to the GEORGE A. FULLER CO., 111 Broadway for the construction of a 7-story express building.

✚We are officially imformed that the contract has been awarded to the TURNER CONSTRUCTION CO., 11 Broadway, for the construction in reinforced concrete of a 6-story and basement-factory building, 100 ft. x 118 ft. in plan, to be erected on Washington and Park Aves., Brooklyn, for Wallace & Co., Howard Chapman, Arch. Work to go ahead at once.

✚The contract for building the new home of the North Side Board of Trade was let to the AMERICAN REAL ESTATE CO., by the Board of Directors of the North Side Board of Trade Building Co., Inc., after a meeting. They voted to purchase the plot 49 by 100 at 138th St. plaza, between Third and Lincoln Aves., at a cost of $40,000. The building will cost $64,850. The building will be a 3-story structure in the classic style of architecture of the Ionic order, and with the exception of a granite base, which will extend all around the 250 feet of frontage, the exterior will be faced with white terra cotta, matt finish. The ground floor is planned for a bank or commercial business with an entrance direct from the plaza; the second floor for offices, and the third floor exclusively for the North Side Board of Trade.

The contract has been awarded to the MURPHY BROS., 200 Fifth Ave., for the construction of a 6-story brew house at 92d and Second Ave. The owner is Otto C. Wolf, Philadelphia, Pa.

Plans have been completed by Emery Roth, 18-20 East 42d St. for the construction of a 10-story apartment house, at 148th St. and Riverside Drive. Harry Aronson, 159th St. is owner. The cost is $200,000.

Plans have been prepared by William A. Boring, 32 Broadway, for the erection of a garage at 8-14 Clinton St. The Clinton Garage Co. is the owner. The cost is $75,000.

New York, N. Y.—Bids will be received by Joseph Johnson, Fire Comr., Fire Dept., of the City of New York, 157 and 159 East 67th St., until 10.30 a. m., July 31, for furnishing all the labor and materials required for the erection and completion of 21 fire stations in New York City.

Rochester, N. Y.—A 6-story apartment house will be erected by the Jos. A. Schantz Co., in St. Paul St., near Central Ave. Plans have been prepared by Fay & Dryer, 310 Cutler Bldg., Rochester.

Atlantic City, N. J.—The St. Charles Hotel Co. of Atlantic City has taken preliminary steps to the erection of a 10-story addition to the large hotel to cost $300,000. Hewitt & Faist, Philadelphia, Pa., are Archs.

✚Woodbury, N. J.—The contract has been awarded to WILLIAM H. BEST, for the construction of the school here which was recently destroyed by fire.

Philadelphia, Pa.—A bank building will be erected by the Continental Title & Trust Co., Stephen Girard Bldg., at Twelve and Market Sts.

Philadelphia, Pa.—John T. Windrim, Arch., Commonwealth Bldg., is preparing plans for a $40,000 free library building at Twentieth and Snunk St. on land donated to the city by the Stephen Girard estate.

Pittsburg, Pa.—Thos. Hannah, Arch., 1712 Keenan Bldg, Pittsburg, is taking bids for a 3-story brick apartment to be erected for Hugney & Matthew in Lang Ave., 15th Ward. This building will be 28x100 ft., contain four suites of five rooms and bath each and two storerooms.

✚Rittersville, Pa.—DOYLE & CO., of Philadelphia, who holds the contract for the Homeopathic Insane Asylum at Rittersville, were awarded the contract to finish the same this afternoon. Their bid was $337,000, part of the wards to be completed by Feb. 1, 1912, and the remainder by April 1 Three other bids were received, as follows: John R. Wiggins & Co., Philadelphia, Plan No. 1, to finish entire by May 1, 1912, $348,200; Plan No. 2, to finish entire by Dec. 1, 1911, $355,400. Ritter & Smith, Allentown, Plan No. 1, to finish by June 1, 1912, $440,000; Plan No. 2, to finish by Dec. 1, 1911, $449,000. James G. Doak & Co., Philadelphia, Plan No. 1, to finish by April 1, 1912, $359,492; Plan No. 2, to finish by Dec. 1, 1911, $364,492.

Baltimore, Md.—Albert Bondy has purchased a lot from the Brooks estate on which he will erect a $300,000 apartment house. The lost fronts 140 ft. on Eutaw Pl. It is 140 ft. deep and is next to the lot that adjoins Druid Hill Park. The apartment house he will build will contain about 100 apartments of various sizes. The building will be eight or ten stories high and will probably have a roof garden.

✚Washington, D. C.—The contract has been awarded to A. T. HOWISON for the construction of an 8-room school at 30th and R Sts. The cost is $90,388.

✚Petersburg, Va.—The contract has been awarded to J. W. DAVIS, Newport News, for the construction of a 7-story building at Sycamore and Tabb Sts. The Benevolent Mechanic Association is owner. The cost is $125,000.

Bluefield, W. Va.—The Bluefield Office Bldg. Co., Bluefield, will construct a $75,000 office building. D. E. French is one of the incorporators.

***Atlanta, Ga.**—Bids will be received until noon, Aug. 10, by the Commissioners of Roads and Revenues, H. E. W. Palmer, Chn., for the furnishing of all material and labor required for the reinforced-concrete frame work, consisting of columns, girders, beams, floor slabs and pile caps for a building covering an area of approximately 130 x 220 ft., consisting of sub-basement, basement and nine stories, for a court-house to be erected on the southeast corner of South Pryor and East Hunter Sts., in Atlanta, Ga., for Fulton County. Plans on file at the office of Associate Archs. A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Bldg., Atlanta, Ga.

*Bids will be received until noon, Aug. 10, by the Commissioners of Roads and Revenues of Fulton County, Ga., H. E. W. Palmer, Chn., for the furnishing of all material and labor required for the concrete piling in the various acceptable methods to receive the piling caps, columns, etc., for a building covering an area of approximately 130 x 220 ft., consisting of sub-basement, basement and nine stories, for a court-house for Fulton County, Ga., to be erected on the southeast corner of South Pryor and East Hunter Sts., in Atlanta, Ga., for Fulton County.

*Bids will be received by the Commissioners of Roads and Revenues of Fulton County until noon, Aug. 10, for the furnishing of all material and labor required for the structural steel work, consisting of columns, girders, beams, bases, etc., for a building covering an area of approximately 130 x 220 ft., consisting of sub-basement, basement and nine stories, for a court-house for Fulton County, Ga., to be erected on the southeast corner of South Pryor and East Hunter Sts., in Atlanta, Ga., for Fulton County, Ga.

*Bids will be received by the Commissioners of Roads and Revenues of Fulton County until noon, Aug. 10, for the furnishing of all material and labor required for the tile fireproofing of all interior structural steel columns, beams, floor arches for a building covering an area approximately 130 x 220 ft., consisting of sub-basement, basement and nine stories, for a court-house for Fulton County, Ga., to be erected on the southeast corner of South Pryor and East Hunter Sts., in Atlanta, Ga., for Fulton County, Ga.

*Bids will be received by the Commissioners of Roads and Revenues of Fulton County until noon, Aug. 10, for the furnishing of all material and labor required for the waterproofing in the basement and sub-basement of floors, walls, etc., for building covering an area of approximately 130 x 220 ft., consisting of sub-basement, basement and nine stories, for a court-house for Fulton County, Ga., to be erected on the southeast corner of South Pryor and East Hunter Sts., in Atlanta, Ga., for Fulton County, Ga. (For details see advertisement in this issue.

Cordele, Ga.—Bids were received as follows on July 17 by the Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Cordele, Ga.: Newport Contracting & Engineering Co., Newport News, Va., $56,563; Algernon Blair, Montgomery, Ala., $63,400; George Becking, Chattanooga, Tenn., $56,858; George A. Clayton, Atlanta, Ga., $71,636; Ambrose B. Stannard, New York, $54,500.

Birmingham, Ala.—Plans are being prepared by H. B. Wheelock, Birmingham, for the proposed erection of the city prison on Ave. A.

Memphis, Tenn.—Plans for the construction of a $500,000 warehouse have been approved.

Memphis, Tenn.—A 7-story fireproof building will be erected by the Memphis Athletic Club, North Third St. The estimated cost is $258,000.

Lebanon, Ky.—Bids will be received until Aug. 10 by James Knot Taylor, Superv. Arch., Tresury Dept., Washington, D. C., for the construction complete (including plumbing, gas piping, heating aparatus, electric conduits and wiring and interior lighting fixtures), of the U. S. postoffice at Lebanon, Ky. Drawings and specification may be obtained from the custodian of site at Lebanon, Ky., or at the discretion of the Superv. Arch.

Winchester, Ky.—Bids were received as follows on July 17, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Winchester, Ky.: Interstate Construction Co., Saginaw, Mich., $97,832; James de Vault & Co., Canton, Ohio, $84,000; Newport Contracting & Engineering Co., Newport News, Va., $93,538; King Lumber Co., Charlottesville, Va., $99,800; James Corse, Racine, Wis., $77,775; George W. Stiles Construction Co., Chicago, $85,468; John G. Unkefer & Co., Minerva, Ohio, $88,343.

Columbus, Ohio.—Kiser, Houser & Hoe, whose warehouse was burned some time ago, are reported to have announced that they wil erect a fireproof warehouse at Maple St. and Park Alley, near the Hocking Valley tracks. The new building will be reinforced-concrete construction, three stories high, and 100 x 100 ft. ground plan.

Massillon, Ohio.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until Aug. 16, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures) of the U. S. post office at Massillon, Ohio. Drawing and specifications may be had from the custodian of site at Massillon, Ohio, or at the discretion of the Superv. Arch.

Toledo, Ohio.—Plans have been prepared by George S. Mills, Gardner Bldg., for the construction of a club house. The cost is about $250,000.

Toledo, Ohio.—J. W. Matz, 25 Hartford Bldg., Toledo, Ohio, has been commissioned to prepare plans for a new stone and granite mausoleum, 90 x 123 ft. Details have not been decided.

Ironton, Ohio.—Bids were received as follows on July 17 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Ironton, Ohio: James de Vault, Canton, Ohio, $69,400; Merrick Fire Proofing Co., New York, $77,800; Ed Henry, Catlettsburg, Ky., $68,390; John G. Unkefer & Co., Minerva, Ohio, $71,476; Henry Karg, Columbus, Ohio, $71,400.

Bloomington, Ind.—The Trustees of the Sigma Nu fraternity at Indiana University has ordered plans for a complete remodeling of the fraternity building and for the installation of a heating plant.

Brazil, Ind.—William Collins, Trustee Brazil Township, has ordered plans for the erection of a new consolidated school building. Bids will be solicited as soon as plans are completed.

Evansville, Ind.—Plans for remodeling the Intermediate Life Bldg. have been completed by Clifton Shopbell, Arch., who will ask for bids soon. The improvement includes the addition of 50 office rooms, a new light court, new monolith floors, a new electric elevator and a new heating system.

Ft. Wayne, Ind.—The Ft. Wayne & Northern Indiana Traction Co. has purchased a site on Main and Pearl Sts., on which to erect a traction terminal station.

Frankfort, Ind.—Bids will be asked by the Commissioners of Clinton County for the construction of a brick and stone jail as soon as plans are completed and approved.

Gary, Ind.—The Trustees, Chas. W. Maine, Secy., of the Y. M. C. A. Ass'n, have ordered plans for the erection of a club building to cost $500,000. Bids will be received when plans are approved.

Indiana Harbor, Ind.—The trustees of the First United Presbyterian congregation will ask for bids for the erection of a church as soon as plans are completed.

Indianapolis, Ind.—The Indianapolis Park Board is planning to let a contract for the construction of a natatorium and playgrounds on South Meridian St. Estimated cost, $50,000.

Plans are being made for the construction of a summer garden and concert hall on the Crawfordsville road near the Speedway. Bids will be in order soon. H. W. Raymond is at the head of the Co.

The Trustees of the German Evangelical Zion's Church have purchased a site on corner New Jersey and North St., on which to erect a $50,000 church. Bids will be solicited as soon as plans are completed.

The Fletcher Realty Co. has plans and specifications ready for bidders for a contract to erect a 21-story business and office building in East Washington St.

Jeffersonville, Ind.—Michael Switow has ordered plans for the erection of a theatre on corner Spring and Maple Sts.

Laporte, Ind.—The School Board has purchased a site and ordered plans for the erection of a school building on Pine Lake Av. Bids will be solicited as soon as plans are completed.

Portland, Ind.—Wm. D. Swartz and the local lodge of Elks will soon ask for bids for the erection of a 4-story brick business and lodge building.

Princeton, Ind.—Plans and specifications have been received by the Post Master for the construction of a $65,000 federal building here. Bids will be received by James Knox Taylor, Superv. Arch., Washington, D. C.

Rushville, Ind.—Plans are being made for the erection of a new 2-story station building by the Indianapolis & Cincinnati Traction Co.

Terre Haute, Ind.—The Trustees of the Indian Normal School have purchased a site on Mulberry St., adjoining the main building, on which to erect a science building.

Vincennes, Ind.—The Board of Directors of the Vincennes Y. M. C. A. has purchased a site on Fourth and Broadway on which to build a 4-story structure. The Building Committee, Frank H. Oliphant, Ch., will ask for bids as soon as plans and specifications are approved.

Vincennes, Ind.—The School Board is asking for bids for the erection of a large addition to and the complete remodeling of the Frenchtown school building. John Downey is Ch.

Crystal Falls, Mich.—John D. Chubb, 32 North Clark St., Chicago, Ill., has been commissioned by the city of Crystal Falls, Mich., to prepare plans for a city hall. The details of construction have not been fully decided.

Detroit, Mich.—The Board of Education, William J. Lee, Secy., 50 Broadway, will receive bids until Aug. 8, for an 18-room school building to be located on Hamilton Blvd. The building will cost in the neighborhood of $50,000. Ammerman, McCall & Anderson, 1330 Penobscot Bldg., are the Engrs.; Malcomson & Higginbotham, Moffat Bldg., are the Archs.

✚R. E. Roseman, 1302 Penobscot Bldg., has awarded the structural iron contract for the 7-story and basement business building, 75 x 100, for John P. Hemmeter, 32 Hancock Ave., to RUSSEL WHEEL & FOUNDRY CO., Chene St. and Belt Line R. R. Architect will soon take figures on the remaining construction. Cost, $75,000.

William H. Klug, 895 Seyburn Ave., has had plans prepared and will soon erect 20 residences on Chippewa Ave., at a cost of $40,000. Owner will purchase all materials and will sublet all contracts.

✚Donaldson & Meier, Archs., Ammerman, McColl & Anderson, Engrs., both in the Penobscot Bldg., have awarded the following contracts for the Church of Annunciation, the Rev. James Stapleton, Rector, 181 Bowen Ave., the church will seat 1,000 and will cost about $200,000: Structural iron work let to the DETROIT BRIDGE & STEEL CO., Dearborn Ave. and M. C. R. R.; carpentry let to HARCUS & CO., 774 Russell St.; slate roofing let to the HOWIE ROOFING CO., 370 Fourth Ave.; steam heating to P. WENZEL, 1176 Gratiot Ave.; plumbing let to OTTO WURM, 50 Adam Ave. W.; electric work let to SEIDLER-MINER ELECTRIC CO., 207 Jefferson Ave.; plastering let to H. SCHAEFER, 116 Macomb St.

Detroit, Mich.—The McCreery Engineering Co., Toledo, Ohio, will erect a structural steel building in Detroit, Mich., to be 90 x 100 ft., saw tooth construction with a high erecting bay served by a traveling crane.

Chicago, Ill.—The Rand-McNally Co. will soon begin construction of a 10-story building on the property on South Clark St., 198 ft. north of Harrison St. The structure will be fireproof and of brick and stone.

Green Bay, Wis.—Plans are being prepared by Foeller & Schober, Fox Blk., for the construction of an addition to the Elks Club.

✚**Duluth, Minn.**—Contracts have been awarded by Chief Engineer Hazen to BAILEY & MARSH, of Minneapolis, for the construction of a 10-stall roundhouse, machine shop and a large storehouse and office building.

Eveleth, Minn.—Plans have been completed by the School Board for the erection of a 10-room school,, to cost about $60,000. The school will face McKinley Ave. instead of Fayal road, and will be much larger than the old Fayal building. The Fayal school will contain a modern gymnasium. An addition of 100 ft. has been secured for the new educational institution.

Minneapolis, Minn.—Plans are being completed by Bertrand & Chamberlin for the construction of a reinforced-concrete and pressed brick 5-story building to be erected by David P. Jones & Co., for a printers' exchange, stationers and allied lines, at Seventh Ave., S and Fourth St., on Milwaukee railroad trackage. The building will cost $150,000.

✚**Lead, S. Dak.**—The Superv. Arch., Treasury, Dept., Washington, D. C., has awarded the contract for the construction of a post office at Lead, S. Dak., to MULLEN & ROURKE, Deadwood, S. Dak., at $73,163.

St. Louis, Mo.—Bids are being received for a steel and concrete mercantile building for the Franklin Realty Co., 1816 Wright Bldg., at an approximate cost of $75,000.

Hot Springs, Ark.—Bids were received on July 18, by the Secretary of the Interior, Washington, D. C., for the construction of a building on the Hot Springs, Ark., reservation. The lowest bid was that of M. H. Jodd, Hot Springs, Ark., $34,149. The Department has decided to reject the bids and will readvertise for bids, opening Sept. 15.

✚**Dallas, Tex.**—The contract has been awarded to the GILSONITE CONSTRUCTION CO., St. Louis, Mo., for the construction of a 22-story concrete hotel at Commerce and Akrard Sts. The estimated cost is $650,000. Plans were prepared by Barnett, Haines & Barnett, Frisco Bldg., St. Louis.

Houston, Tex.—A hotel building will be erected in the vicinity of the new Union Station of the Houston Belt & Terminal Ry. The GULF COAST CONSTRUCTION CO. is the contractor. The hotel will be of steel and concrete, finished in stone, pressed brick and terra cotta. The ground floor will consist of four modern store rooms with large plate glass fronts and windows. The lobby of the hotel, also occupying the lower floor, will be finished in marble with marble mosaic floor. There will be 104 rooms with baths.

***Mineral Wells, Tex.**—Bids will be received by Jas. Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until Aug. 17, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures) of the U. S. post office at Mineral Wells, Tex. Drawings and specification may be obtained from the custodian of site at Mineral Wells, Tex., or at discretion of the Superv. Arch.

Port Arthur, Tex.—Two or three warehouses will be erected by the Texas Co. J. S. Cullinan is Pres.

Reno, Nev.—It is reported that Clarence H. Mackay has appropriated $250,000 for the construction of a library and administration building for the University of Nevada.

Portland, Ore.—It is reported that plans are being prepared by E. F. Lawrence, Portland, for the construction of a 6-story building. The structure will be 50 x 100 ft. in size, and besides six regular stories it will have a mezzanine floor and full basement. It will be built by the Masonic Lodge in Salem. The two top floors will be used exclusively for lodge purposes. Three floors will contain offices, while the ground floor will be occupied with stores. The exterior will be of pressed brick and terra cotta. The cost of the structure will approximate $100,000. It is expected that the contract for the construction will be let early next month.

Salem, Ore.—Plans have been prepared by William McGilchrist, Jr., for the construction of a steel building on Vieral St. The estimated cost is $100,000.

Fresno, Cal.—Construction work will soon start on the erection of two office buildings and an apartment in Fresno. The estimated cost is about $250,000.

✚**Los Angeles, Cal.**—Architects Parkinson & Bergstrom, Security Bldg., awarded contracts as follows for construction work on the Union Oil Bldg., at Seventh and Spring Sts.: Sheet metal work to CALIFORNIA CORNICE WORKS, 1510 San Fernando St., $10,523; plumbing to HOWE BROS., Sixth and Spring Sts., at $28,000; ornamental iron work to PACIFIC ORNAMENTAL IRON WORKS, $34,000; exterior sash and interior finish to HUGHES MFG. CO., at $67,500.

Juneau, Alaska.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until Aug. 8, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the Executive Mansion, etc., at Juneau, Alaska. Drawings and specification may be obtained from the custodian of site at Juneau, Alaska, or at the discretion of the Superv. Arch.

Quebec, Que.—C. M. Hays, Pres. of the Grand Trunk Pacific National Transcontinental Ry., has approved the plans of Marchand & Haskell for the depot to be erected on the old Champlain market site, at a cost of $750,000. P. E. Ryan, Ottawa, is Secy. National Transcontinental Ry.

Kingston, Ont.—Bids will be received until July 31, by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, for additions and alterations to post office. Specifications, etc., on application to Dept. or to William Newlands & Sons, Archs., Kingston.

Ottawa, Ont.—Bids will be received until Aug. 3 by P. E. Ryan, Secy. National Transcontinental Ry. Commissioners for the erection of station and other buildings required along the line of railway as follows: Section 10, from Cochrane to Currie, Province of Ont.; Section 11, from Fraser to Grant, Province of Ont.; Section 12, from Superior to Dugal, Province of Ont.; 1,000-ton coaling station at Grant, miles 232.7, district "D." Plans, specifications, etc., may be seen at office of Gordon Grant, Ch. Engr., Ottawa, or A. N. Molesworth, Dist. Engr., Cochrane, Ont., for Section 10 and 11 and 1,000-ton coaling station, and S. R. Poulin, Dist. Engr., St. Boniface, Man., for Section 12.

Port Arthur, Ont.—The erection of a $1,000,000 storage and transfer warehouse is contemplated by the General Storage Corporation.

✚**Brandon, Man.**—The contract for the construction of the Canadian Pacific Ry. depot here has been awarded to the BRANDON CONSTRUCTION CO., at $60,000, to be completed by Feb. 1 next year.

Humboldt, Sask.—Bids will be received until July 31, by R. C. Desrochers, Secy. Pub. Wks., Dept. Ottawa, for the construction of a public building. Specifications, etc., at office of J. E. Cyr, Supt. Pub. Bldgs., St. Boniface, Man.

WATER SUPPLY—IRRIGATION.

Boston, Mass.—The Metropolitan Water and Sewerage Board will soon ask for bids for the erection of a pumping station in Hyde Park, near the Boston line. Several pumps will be installed, and 3,000 ft. of 20-in. force main laid. Dexter Brackett is Ch. Engr., Boston.

Lynn, Mass.—Additions to the waterworks to cost $190,000 are contemplated. Among other improvements the construction of a dam is planned. George A. Leland is City Engr.

✚**Pittsfield, Mass.**—The contract for laying two miles of 18-in. pipe has been awarded to DANIEL A. DOREY by the city.

✚***Pittsfield, Mass.**—Bids were opened on July 10 by the Board of Public Works for laying water-pipe. The contract for 10,400 ft. of 24-in. pipe was awarded to HENRY SPINACH & CO., of Waterbury, Conn.; same firm was awarded contracts for laying 6-in c.-i. pipe for blow-offs, at $2.38 a ft., for rock excavation below the regular bottom of the trench, at $4 per yd., for rock excavation above the regular grade of the bottom of the trench, at $2.75; 60 cts. per yd. for earth excavation below the grade of the bottom of the trench; $5 each for all air valves set and $10 per yd. for concrete masonry.

Springfield, Mass.—The city will install a 12,000,000-gallon, vertical triple-expansion, flywheel pump. Estimated cost, $50,000.

Worcester, Mass.—An appropriation of $96,000. has been made for an immediate supply of water from Coes Pond, and for the construction of the Asnebumskit system. It is also proposed to devise means for pumping and purifying the water from Lake Quinsigamond. F. A. McClure is City Engr.

New York, N. Y.—Bids will be received by the Board of Water Supply, 165 Broadway, New York, until 11 a. m., Aug. 1, for Contract 87, for the construction of the Brooklyn conduit, a portion of the city pipe lines of Catskill Aqueduct, in the City Aqueduct Department, and extending from the junction of Flatbush Ave. and Schermerhorn St., in the Borough of Brooklyn, along Third Ave., Baltic St., Park Pl., Sixth Ave., 24th St., and Fifth Ave. to 364h St. The work to be done includes furnishing and laying of about 17,200 ft. of 66-in. steel pipe, a 66-in. Venturi meter, valves and other appurtenances, together with maintenance for one year.

✚**Canajoharie, N. Y.**—The contract has been awarded by the city to DAVID J. SNELL, of Canajoharie, for completing the new municipal water system.

Churchville, N. Y.—The town is considering the installation of a waterworks system.

Mount Morris, N. Y.—We are officially advised that the cost of constructing a new gravity water-works system has been estimated at $115,000. Incorrectly noted on July 13, as $15,000. Witmer & Brown are Consult. Engrs., Buffalo, N. Y.

***New York, N. Y.**—Bids will be received by the Board of Water Supply, 165 Broadway, New York, until 11 a. m., Aug. 3, for Contract 107, for furnishing and delivering certain apparatus and materials at designated localities and furnishing, delivering and installing certain other apparatus and materials in various structures along Catskill Aqueduct, in Ulster and Putnam Counties, and in the Borough of Brooklyn, City of New York, New York. The apparatus and materials consist of 233 6-in. to 54-in. gate valves two 40-in. blow-off valves, two hydraulic cylinders for 40-in. blow-off valves, four hydraulic cylinders for 54-in. gate valves, bronze and c. i. piping and miscellaneous appurtenances. Joseph P. Morrissey is Secy.

Bids for furnishing, delivering and laying watermains in Gosman, Graham, 17th and Van Deventer Aves., Borough of Queens, were received on July 14, as follows: New York, Beaver Engineering & Constructing Co, New York, $45,545; Daly Bros., Brooklyn, N. Y., $47,935; Walton Construction Co., Wadsworth Ave. and 177th St., N. Y., $54,342; Rotwell D. Williams, 21 Park Row, New York, $52,618; Peace Bros., Long Island City (L. I.), N. Y., $48,085; Wilton Contracting Co., New York, $54,390; Nelson & Dooling, $46,529.

Niagara Falls, N. Y.—The following bids were received on July 3 by the Board of Water Commissioners for laying mains on (a) Ninth and Tenth Sts., (b) on Buffalo and Erie Aves., and (c) Falls St.: William Infran (a) $8,507, (c) $12,372; Charles T. Shepard, (a) $11,640, (b) $26,181; Tony Reynolds, (a) $15,061; W. H. Coleman, (a) $11,598, (b) $31,264; Nick Neff, (a) $15,286, (c) $14,611. Bids were received for furnishing valves, hydrants and c.-i. pipe as follows: Valves, Rensselaer Valve Co., $3,870; Ludlow Valve Mfg. Co., $3,920; hydrants, Rensselaer Valve Co., $1,798; Ludlow Valve Mfg. Co., $1,749; c.-i. pipe, U. S. Cast Iron Pipe & Foundry Co., $35,277; Chas. Millar & Sons Co., $36,773.

✚**Salem, N. Y.**—The contract for constructing the water-works here, has been awarded by the city to the PORT JACKSON ENGINEERING CO., of Amsterdam, N. Y., at $38,741.

✚**Schenectady, N. Y.**—The Board of Contract and Supply has awarded a contract to KELLAM & SCHAFFER for laying watermains in various streets.

✚***Crosswicks, N. J.**—The Crosswicks Water Co. has awarded the contract to THOMAS J. McGOVERN of Trenton, N. J., for constructing water-works, at $13,500.

✚**Aliquippa, Pa.**—The contract for constructing the brick pump-house, concrete retaining wall, one 90-HP. engine and one 118,400 gallon pump, etc., has been awarded to CHANDLEY BROS., of Beaver Falls, Pa., at $22,000. Bids were received on June 26.

Erie, Pa.—The city has employed the firm of Chester & Fleming, Consult. Engrs., Union Bank Bldg., Pittsburg, Pa., to make a report and prepare preliminary plans and estimates for extensive improvements to the water-works system of the city.

New Berlin, Pa.—The village is considering the installation of a waterworks system. Estimated cost, about $8,000.

Phoenixville, Pa.—The borough has employed the firm of Chester & Fleming, Engrs., Union Bank Bldg., Pittsburg, Pa., to design and install a hypochloride treatment plant to disinfect the water supply of the borough, which is taken from the Schuylkill River.

Barnesville, W. Va.—The citizens are considering the installation of a water works system.

Charlotte, N. C.—The citizens on July 4 voted to issue $350,000 of bonds for the construction of water-works. Joseph Firth is City Engr.

Bronwood, Ga.—The city is considering the construction of water-works, including a 50,000-gallon steel tank. Estimated cost, $10,000.

✚**Macon, Ga.**—Bids were received by the Clerk of the Council on July 10, for digging trenches and laying 5,003 ft. of 12-in. pipe; 3,140 ft. of 8-in. and 5,362 ft. of 6-in pipe, with hydrants, gate valves, tees, elbows and other special castings. Bids were received for construction and material of entire work, and also for construction alone. The contract was awarded to J. B. McCRARY & CO., of Atlanta, Ga., at $14,000.

✚**Gadsden, Ala.**—The contract has been awarded by the Water-Works Department to the AMERCAIN C.-I. PIPE CO. for about 900 tons of pipe. Contract for about 26 hydrants has been let to the LUDLOW VALVE CO. Bids were received on June 21.

Montgomery, Ala.—The city has decided to ask the U. S. Government to establish a reservoir on the Coosa River.

Clarksdale, Miss.—The city proposes to make extensions to the water-works system, sewers and lighting system. Estimated cost, $50,000. W. S. Bobs is Supt. W.-Wks.

***McKenzie, Tenn.**—Bids will be received until 2 p. m., Aug. 3, by the Board of Aldermen and Mayor, for the construction of a water-works and electric light plant. C. H. Jenks, is Engr., Union City, Tenn. This is a postponement from July 27.

Newburg, Ohio.—See item under Streets and Roads.

Akron, Ohio.—Engineers engaged by the city to locate a source of water supply for the new municipal plant have reported in favor of the Tuscarawas River Valley, south of the city. A reservoir four miles long and 55 ft. deep will be constructed.

Cincinnati, Ohio.—Bids will be received at the office of the Director of Public Service, City Hall, until noon, July 25, for laying c.-i. pipe, special castings and valves, and other miscellaneous work in connection therewith, for the water distribution system under the Little Miami River at Union Bridge. Plans, specifications and blank proposals can be obtained at the office of the General Superintendent of Water-Works. John J. Wenner is Clk.

Ironton, Ohio.—Kimberly, Burgess & Long, Consult. Engrs., Columbus, Ohio, have completed plans for a test well of 500,000 gallons capacity per day. F. A. Ross, is City Clk.

Lucasville, Ohio.—The installation of a water-works system here is being considered. W. E. Purdy is interested.

Massillon, Ohio.—The City Council has passed a resolution providing for the issuance of bonds for $150,000 for the installation of a water-works system.

Flint, Mich.—The Board of Water Commissioners has extended the date for receiving bids for the proposed filter plant from July 13 to July 20. W. G. Clark is Consult. Engr., The Spitzer, Toledo, Ohio.

***Grand Rapids, Mich.**—Bids will be received by the Board of Public Works until 8 p. m., July 27, for one steam boiler for combination pumping and lighting station, according to the plans and specifications on file at the office of the Board. Samuel A. Fleshney is Secy. and Gen. Mgr.

Saginaw, Mich.—The City Council has authorized the Water Board to install two new pumps for temporary relief in the West Side Station. Estimated cost, $7,000.

Bloomington, Ill.—Bids will be received by the Board of Local Improvements, until 2 p. m., July 20, for the construction of water mains, hydrants, etc. A. L. Moore, is Chn. Bd.

+Chicago, Ill.—The Board of Local Improvements has awarded the contract to WILLIAM MORAN & CO., for constructing the 12-in. water-main in North Chicago St.

+Joliet, Ill.—The Board of Local Improvements has awarded the contract to WILLIAM MORAN & CO., of Joliet, for the construction of a 12-in. water main in North Chicago St., from Webster St. to Jefferson St.

Mendota, Ill.—Bids were received by the City Council on July 3 and rejected for constructing an iron and concrete roof on the reservoir at the water-works plant.

Green Bay, Wis.—We are officially advised that an appraisement together with estimate of cost for the construction of a new water-works plant is being made for Green Bay, by Burns & McDonnell, Consult. Engrs., Scarritt Bldg, Kansas City, Mo.

+Cherokee, Iowa.—The city council on July 14 awarded the contract to the MIDWEST ENGINEERING CO., McCague Bldg., Omaha, Neb., for the construction of a new reinforced concrete reservoir and the repair and lining with concrete of the old reservoir.

Council Bluffs, Iowa.—We are officially advised that plans and specifications are being prepared by Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo., for water-works improvements at Council Bluffs. Approximate cost, $250,000.

Prairie City, Iowa.—F. C. Turner, City Clerk, will receive bids until Aug. 2, for extending the water mains.

+Sheldon, Iowa.—The City Council has awarded the contract to the LYTHE CONSTRUCTION CO., of Sioux City, Iowa, for water-main extensions. E. W. Smale, is City Clk.

Wall Lake, Iowa.—J. H. Sievert, Clk., will receive bids until 6 p. m., July 26, for the construction of a water-works system. Plans can be seen at the office of the Clerk or at the office of the Des Moines Bridge & Iron Co. Engr., Des Moines, Iowa.

Biwabik, Minn.—Bids will be received from July 20 by J. E. Riley, Village Clk., for constructing water and sewer mains in Shank's Addition.

+Clara City, Minn.—Bids were received on July 11 by C. S. Swiers, Village Recdr., for constructing water-works, as follows: J. G. Robertson, St. Paul, $13,099; W. D. Lovell, Minneapolis, Minn., $13,400; Fraser & Danforth, Rochester, Minn., $13,148; Turner Bros., Webster, S. Dak., $13,849; DES MOINES BRIDGE & IRON CO., Des Moines, Iowa, two bids $11,980 and $11,250 (awarded contract).

Columbia Heights, Minn.—C. N. Dahl, Village Clk., will receive bids until 6. p. m., July 25, for the construction of 6 and 8-inch water-mains.

Montevideo, Minn.—Bids will be received until July 24 by the City Clerk for constructing water mains in portions of Canyon Ave., First, Third and North Fourth Sts.

Shakopee, Minn.—Bids will be received until 8 p. m., July 27, by H. F. Hecker, City Recdr., for drilling and completing a 10-in. well, not less than 300 or more than 700 ft. deep, cased. L. P. Wolff, is Engr., St. Paul, Minn.

Chapman, Kan.—We are officially advised that plans and specifications are being prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for the construction of a water-works and lighting plant at Chapman. Approximate cost, $35,000.

Independence, Kan.—The city is considering improvements to the water works system. A. D. Stivers is Engr., Independence.

Solomon, Kan.—Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo., are preparing plans for the construction of a system of water works and electric lights here. Estimated cost, $30,000.

Valley Falls, Kan.—Plans and specifications are being prepared for water-works at Valley Falls, by Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo. Water is to be secured from springs. Approximate cost, $30,000.

Benson, Neb.—The citizens have voted to issue $25,000 of bonds for water-works.

+Brainerd, Neb.—The contract for the construction of the water-works system here, has been awarded by the city to the ALAMO ENGINE & SUPPLY CO., of Omaha, Neb.

+Chadron, Neb.—Bids were opened on July 6 by the city for the construction of a concrete dam, earth fill, and wood-stone conduit line from the dam to the city. Contracts, we are officially advised, have been awarded as follows: Wood-stave pipe, to the PORTLAND WOOD PIPE CO., of Salt Lake City, dam and wings, etc., laying pipe and refilling, to the INTER-MOUNTAIN BRIDGE & CONSTRUCTION CO., at $8,232. G. E. Marriott is City Clk.

Lincoln, Neb.—Bids will be received by the Sanitary District, No. 1, 304 Brownell Block, K. D. Cunningham, Chn., until noon July 31, for 150 to 250 ft. extension of the Antelope Conduit.

Malino, Neb.—Bruce & Standevan, Consult. Engrs., Bee Bldg., Omaha, Neb., are preparing plans for the construction of a system of water-works here. Estimated cost, $9,000.

Seward, Neb.—The citizens have voted to issue $13,500 of bonds for connecting the water mains with the Blue River.

Upland, Neb.—Plans are being prepared for the installation of a water-works system here. Bonds for $10,000 have been voted. J. R. Bucknell is Village Clk.

Wilcox, Neb.—The citizens have voted to issue $13,000 of bonds for the installation of a water system.

Onida, S. Dak.—The citizens have voted to issue bonds for $11,000 for the installation of a water-works system, here.

+*Mandan, N. Dak.—G. W. HAGGERT, of Fargo, N. Dak., has been awarded the contract by the City Council for the construction of the water-works system here, at $74,142. The work will include a pumping plant, intake, intake well, power house, reservoir and pipe line from river to reservoir and from there to the city. Bids were opened on June 29.

+Valley City, N. Dak.—The FARGO HEATING & PLUMBING CO., of Fargo, N. Dak., has been awarded the contract for a new water supply from the river to boiler house at the State Normal School, Valley City at $6,500.

Velva, N. Dak.—H. M. ROUR, Velva, has been awarded the contract for the construction of water-mains. Frank Renning is City Audr.

+Lewistown, Mont.—The city has awarded the contract to LINDSTRUM & OREN, of Butte and Billings, Mont., for trenching and laying 56,000 ft. of 4- to 12-in. c. i. watermain, for the new water-works at $15,703. Noted on June 29.

Greenfield, Mo. — W. H. Schreiber, Consult. Engr., Springfield, Mo., has prepared plans and specifications for the construction of a municipal water plant here.

+St. Louis, Mo.—The contract for erecting exclusive of foundations, at the low service pumping station, Chain of Rocks, two steam turbine-driven centrifugal pumping units, complete, with condensing apparatus, etc., has been awarded by the Board of Public Improvements to DRAVO-DOYLE CO., of Pittsburg, Pa., at $54,950.

Shelbina, Mo.—Bids will be received by the city water-works and sewers about Aug. 15. Estimated cost $80,000. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

+Mena, Ark.—The Waterworks Commission has awarded the contract for the installation of a water-works plant, including furnishing lead and oakum to the TONKAWA CONSTRUCTION CO. of Kansas City, Mo., at $9,576. The contract for furnishing hydrants and valves has been let to the COLUMBIAN IRON WORKS of New Orleans, La. Noted on July 13.

Cleburne, Tex.—Appraisement is being made of the water-works and sewers at Cleburne, and plans and estimate are being prepared for a new municipal plant by Burns & McDonnell Consult. Engrs., Scarritt Bldg., Kansas City, Mo.

Corpus Christi, Tex.—The city is planning for water-works improvements. Estimated cost, $250,000. Engineers are now in the field. F. H. Lancashire, Dallas, Tex., is Engr.

+Dallas, Tex.—The contract has been awarded by the Methodist Southern University of Dallas, to C. H. DEERING & SONS, for sinking an artesian well at the University grounds on the power-house site.

Muskogee, Okla.—New bids will be received, it is reported, by Charles Wheeler, Jr., City Clk., for constructing water-works intake, 54-in. submerged concrete pipe line, 2,600 ft. long, to be laid under the Arkansas River and up to the bed of the Grand River; and for constructing a concrete intake tower at upper end of intake. All bids received on June 27 were rejected. T. F. Clonts is City Engr.

+*Grand Valley, Colo.—Bids were received at the office of the Field, Fellows & Hinderlider Engineering Co., Denver, Colo., on June 26, for the excavation of canals and the construction of headworks, wood-stave pipe flumes, pumping machinery, etc., for the Grand Valley Irrigation District at Grand Valley. The contract has been awarded to LUMSDEN & GORDON, of Grand Junction, Colo., at about $140,000.

Farmington, N. Mex.—We are officially advised that contracts for the construction of water-works here were awarded on July 10 as follows: Supplies and pumping plant, to HENDRIE & BOLTHOFF CO., of Denver, Colo., concrete reservoir and distribution system, to LOFTUS, TUCKER & HALL, of Farmington. Total cost, $44,500. F. P. Hall is City Engr.; G. N. Houston, Equitable Bldg., Denver, Colo., is Consult. Engr.

Coeur d'Alene, Idaho.—Bids will be received by S. A. Bartlett until Aug. 1 for furnishing f. o. b. Coeur d'Alene 40 4-in. 2-way fire hydrants and 27 2-in. water cranes for filling sprinkling wagons.

Downey, Idaho.—The Downey Water Co., of Downey, has been incorporated with a capital stock of $150,000 for the purpose of constructing a water-works system. John Ware is interested.

Mountain Home, Idaho.—The Council is considering an issue of bonds for $35,000 for the purpose of installing and constructing a complete system of water supply for the village.

Phoenix, Ariz.—Bids will be received until July 25 by the Salt River Valley Water Users Association for the construction of three miles of canal, from the proposed new Arizona cross cut power-house, to the present end of the old cross cut canal. The work will require the excavation of 150,000 cu. yds. of earth and rock. Estimated cost $150,000, Charles A. Vanderveer, Secretary.

Sedro Wooley, Wash.—Bids were received by the State Board of Control, Olympia, on June 26 for the installation of a water system at the Northern Hospital for Insane, at Sedro Wooley. The lowest bid follows: Seattle Heating & Plumbing Co., Seattle, $23,977.

Albany, Ore.—The cost of the proposed filtration plant here for the Oregon Power Co., D. C. Green, Mgr., has been estimated at about $30,000. H. M. Byllesby & Co., of Chicago, Ill., are Engrs.

+Baker City, Ore.—The contract for constructing the pipe line from Salmon Creek to the settling basin above the reservoir, eight miles, has been awarded by the city to the IDAHO GLAZED CEMENT CO. of Boise, Idaho, at about $90,000.

Gladstone, Ore.—We are officially advised that Louis C. Kelsey, Selling Bldg., Portland, Ore., has been employed by the city as engineer to prepare specifications, plans, estimates, etc., for a pumping plant and water-works system. An election to vote $20,000 of bonds for construction will be held on July 31.

+Redmond, Ore.—We are officially advised that the contract has been awarded by the city to JEFFRY & BUFTON, of Portland, Ore., at about $25,000, for the construction of new water-works. Noted on June 29.

Alturas, Cal.—We are officially advised that plans for a municipal water-works system to consist of about seven miles of mains and a pumping plant to pump from deep wells are being prepared by Sloan & Robson, Engrs., Nevada Bank Bldg., San Francisco, Cal. Contracts for a steel standpipe and for the driving of wells have already been let and bids for material for the distributing system will soon be asked.

+Corona, Cal.—A contract has been awarded to the LOS ANGELES MFG. CO., for 3½ miles of 16-in. steel pipe in connection with proposed improvements by the water company here.

Escondido, Cal.—The Escondido Mutual Water Co., has decided to replace a wooden flume with a cement ditch. Estimated cost $22,430.

Exeter, Cal.—The citizens have decided to install a water-works system. Estimated cost, $40,000. Noted on July 6.

Lindsay, Cal.—The citizens voted $55,000 of bonds on June 28 for the purchase of the water system here.

San Bernardino, Cal.—The Water Commissioners, have ordered laying 3-in. water pipe in Washington Ave., between B and Arrowhead Aves., and the extension of the 4-in. main in Grand View Ave.

San Francisco, Cal.—The Finance Committee of the City Supervisors on June 23 voted $28,000 auxiliary fire protection bonds for the construction of a reservoir on Ashbury Heights and the Board of Public Works was authorized to repair and enlarge the water supply system at the Relief Home, the cost of which will be about $16,000.

Dresden, Ont.—Bids will be received by J. T. Bridgwater, Town Clk., until noon, July 26, for 4, 6 and 8-in. c.-i. water pipe, about 13,000 ft. in all, and about 35 hydrants, and two 500,000-gallon steam-driven pumps. F. W. Farncomb is Consult. Engr., 64 Bank of Toronto Chambers, London, Ont.

Port Arthur, Ont.—On July 6 the ratepayers carried nine bylaws for water mains, street railway improvements, telephones, lights, sidewalks, roads and pavements aggregating $400,000.

+St. Catherines, Ont.—Bids were received as follows, we are officially advised, by the city on July 13 for pipe laying and tunnel construction: Section A, 3,910 lin. ft., of rock tunnel, 5 ft. x 8 ft.; 42 lin. ft. of 6 ft. x 6 ft. shaft; 1,300 cu. yds. of earth and rock open cut: W. H. WELLER, St. Catherines, $43,845 (awarded contract); Read-Coddington Co., Niagara Falls, N. Y., $44,382; R. Miller & Sons, Toronto, Ont., $44,823; D. West Construction Co., Milwaukee, Wis., $49,942; T. A. McLeod Co., New York, $50,164; Upper & Lobb, St. Catherines, $52,303; W. B. Bryon, Boston, Mass., $65,012; Ryan & Reilley, Philadelphia, Pa., $66,025. Section C, 15,600 ft. of 24-in. pipe laying; 100 cu. yds. of imperfect earth in trench; 50 cu. yds. rock: D. WEST CONSTRUCTION CO., Milwaukee, Wis., $15,917 (awarded contract); Lupfer & Remick, Buffalo, N. Y., $21,148; James Reed & Co., Brantford, Ont., $21,179; T. A. McLeod Co., $21,295; David Walker, $21,682; P. Lorenzo, $24,123; W. B. Bryan, $24,988.

The pipe contract was awarded to the NATIONAL IRON WORKS CO., of Toronto, Ont., at $30.50 for 12 to 36-in. inclusive, f. o b., St. Catherines.

Southampton, Ont.—Bids will be received until July 27 for an intake pipe and filter basin for the town of Southampton. Plans, etc., may be seen at the Town Clerk's office and at the office of Bowman & Connor, Engrs., 36 Toronto St., Toronto and Berlin.

+*Montreal, Que.—Bids were received by the Board of Commissioners, L. N. Senecal, Secy., on July 13, for final filters and appurtenances. The bids were for constructing the final filters and appurtenances, forming a portion of the filtration plant of the city. The final filters are to be of concrete masonry, having a net filtering area of about six acres and a height of 20 to 25 ft. They will be provided with a system of vitrified pipe underdrains, one foot of graded gravel and 2 ft. 3 ins. of filter sand. Electrically operated machines for cleaning the filters, apparatus for heating and ventilating them, and c.-i. piping and valves for conveying and controling the water are to be furnished. The contract, it is reported, has been awarded to the F. H. McGUIGAN CO., of Toronto, Ont., at $673,000. Hering & Fuller, are Engrs., 170 Broadway, New York. Noted on June 8.

SEWERS.

(*Denotes that this work is advertised in Engineering News.)

Boston, Mass.—An appropriation of $300,000, has been made for the construction of sewerage works in the Charles River Basin. L. K. Rourke is Comr. of Pub. Wks.

Boston, Mass.—Bids will be received by the Public Works Department, until July 21, for sewerage works in Byron St., East Boston, and for slope paving at Stoney Brook, West Roxbury. L. K. Rourke is Comr. of Pub. Wks.

***+Fitchburg, Mass.**—We are officially advised that bids for 2,923 lin. ft. earth excavation and refilling in trench for 45-in. concrete sewer, 50 cu. yds. rock excavation, 490 sq. yds. brick masonry in sewer invert, 23 cu. yds. brick masonry in manholes, 1,250 cu. yds. concrete masonry in trench, 40,000 lbs. steel bars for reinforcing, were received by the Sewage Disposal Commissioners on July 11, as follows: McCARTHY & WALSH, East Boston, Mass., $34,441 (awarded contract); Struell & Puckhafer, Bridgeport, Conn., $35,992; George W. Carr Co., Worcester, Mass., $40,092; C. E. Trumbull Co., Boston, $40,171; Joseph Long & Co., Leominster, Mass., $45,162; Moore & Co., Boston, $53,689; Little & Seretto, Leominster, $62,780; Frank H. Cowin Co., Boston, $70,817. Noted on July 13.

***Westfield, Mass.**—We are officially advised that bids for building approximately 7,280 ft. of from 6 to 24-in. pipe sewer, were received by the Selectmen on July 13, as follows: Ablett & Bowes, Cohoes, N. Y., $5,361; J. M. Dineen, Easthampton, Mass., $5,703; D. A. Dorey, Natick, Mass., $5,717; Lopardo & Way, Springfield, Mass., $6,814; J. L. Barry, Boston, Mass., $7,140; H. S. Driscoll & Co., Torrington, Conn., $7,146; A. W. Bryne Co., Hartford, Conn., $8,058; C. A. Rossi, Torrington, Conn., $8,375; Angelo Conty & Co., Hartford, Conn., $8,501; J. J. Falvey, Somerville, Mass., $11,368. Oren E. Parks is Town Engr. Noted July 6.

+New Haven, Conn.—Bids for the proposed changes in the sewers on Union Ave. have been received by the Board of Public Works, as follows: Dwyer & Merrix, $16,893; Lawrence O'Brien, $21,535; Robert D. Daley, $18,640; THOMAS F. MAHER, $16,666 (awarded contract).

Buffalo, N. Y.—The City Council has ordered the construction of 10-in. tile sewers in Stanislaus St., between Beck and Gibson Sts., and in Princeton Pl, south of Seneca St.

Mattewan, N. Y.—The Village is considering the extension of the sewer and water system to the Groveville Mills, at an estimated cost of $60,000.

New York, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., July 26, for construtcing sewers in various streets, estimated as follows: Flatlands Ave., $81,718; Ave. N, $45,083; Ave. N, $39,098; 38th St., and others, $23,648, etc.

+Paterson, N. J.—Press reports state that the contract for constructing Section A of the proposed West Paterson and Totowa Main Sewer, comprising about 2,173 ft. of 36-in. pipe with necessary manholes, etc., has been awarded to McKIERNAN & BERGIN, Paterson, at $28,304. The other bidders were: Frank Puglia, $31,293; Union Building & Construction Co., $33,861; T. M. McLeod, $36,892. Noted July 6.

✚**Lebanon, Pa.**—Bids will be received by the Special Sewer Committee of Councils of the City of Lebanon, until 5 p. m., Aug. 10, for the construction of about 6,400 lin. ft. of reinforced-concrete 30-in. outfall sewer, complete, with manholes, etc., and for a sewage disposal plant. Plans, specifications, etc., can be obtained at the office of T. R. Crowell, City Engr., Lebanon, and at the office of Jas. H. Fuertes, 140 Nassau St., New York, after July 27.

Bids will be received at the same time for constructing about 29,000 lin. ft. of from 6 to 18-in. vitrified pipe sewer, 2,200 lin. ft. of 24-in. reinforced-concrete pipe sewer, together with manholes, flushtanks and other appurtenances. T. R. Crowell is City Engr. and Dan. M. Sharp, City Clk.

Pittsburg, Pa.—Bids will be received by Jos. G. Armstrong, Dir. Pub. Wks., until July 21, for constructing 12 and 15-in. pipe sewers in portions of Jane, Sarah, Mingo and other streets.

✚**Susquehanna, Pa.**—We are officially advised that the contract for laying 5,600 lin. ft. of sewers was awarded on July 13 to VINCENT CASSESE, Scranton, Pa., at $6,426. Noted July 13.

Washington, D. C.—Bids were received as follows on July 12, by the Commissioners of the District of Columbia for sewers in the District: (a) George Hyman, (b) Warren F. Brenizer Co., (c) E. G. Gummel: Rock Creek sewer, ordinary excavation, 6,000 cu. yds., (a) 30 cts.; (b) 80 cts.; (c) 70 cts.; concrete masonry "B," 1,400 cu. yds., (a) $8.75; (b) $8; (c) $7.70; vitrified brick masonry, 200 cu. yds., (a) $21; (b) $21; (c) $20; sewer brick masonry, 25 cu. yds., (a) $14; (b) $14; (c) $13. Anacostia intercepting sewer, excavation, 22,000 cu. yds., (b) $1.70; (a) $2.50; concrete masonry "D," 2,000 cu. yds., (a) $8.50; (b) $8.50; vitrified brick masonry, 100 cu. yds., (a) $25; (b) $20; sewer brick masonry, 100 cu. yds., (a) $20; (b) $14; 6-in. sub-drain pipe, 300 ft., (a) 30 cts.; (b) 30 cts.

Huntington, W. Va.—Bids will be received by the Commissioners of Huntington until 1 p. m., Aug. 7, for constructing 12, 15 and 18-in. vitrified tile sewers in various streets. John Coon is Comr. of Sts., and A. B. Mautin, City Engr.

✚**Thomasville, N. C.**—A contract for constructing sewers has been awarded to J. B. McGRARY & CO., Atlanta, Ga., at $22,528.

Clinton, S. C.—Bids will be received by the Sewerage Comissioner, until 3 p. m., Aug. 21, for laying about nine miles of from 8 to 12-in. sanitary pipe sewers, and two settling tanks. The J. B. McGrary, Empire Bldg., Atlanta, Ga., are Engrs. W. M. McMillan is Chn. and S. W. Sumerel, Clk. of the Comn.

✚**Americus, Ga.**—We are officially advised that bids for sewer extensions were received on July 10, as follows: Guild & Co., $37,962; A. L. Patterson & Co., $41,007; Sullivan, Long & Hagerty, $39,323; P. J. CURRAN, $31,804 awarded contract); H. S. Bosler, $33,465; M. P. Flynn & Co., $47,610; Southern Asphalt & Construction Co., $40,012; Henning-Vineyard, $37,728; I. C. Mishler, $36,810; Dunn & Lallander, $40,599. J. B. Ansley, City Engr., estimated the cost at $37,347. Noted July 6.

Ada, Ohio.—Bids will be received by the County Auditor at Kenton, Ohio, until July 31, for constructing the Ada Sewer Ditch, at Ada, requiring 4,250 lin. ft. 48-in., 3,260 lin. ft. 30-in. and 900 lin. ft. of 18-in. brick sewers.

Canton, Ohio.—See item under Streets and Roads.

New Bremen, Ohio.—Bids will be received by the Village Trustees until July 27, for constructing a sewage disposal plant, including a concrete settling tank and a disinfectant apparatus. A. E. Kimberly, Columbus Savings & Trust Bldg., Columbus, is Consult. Engr., and C. P. Gress is Vil. Clk.

Newburg, Ohio.—Bids will be received by J. W. Shimek, Clk. Bd. of Control, until noon, Aug. 12, for furnishing material and labor necessary for the construction of sewers, water mains, grading and sidewalks, in various streets, in accordance with plans and specifications on file at the office of the William Evers Engineering Co., the Arcade, Cleveland, Ohio.

***Upper Sandusky, Ohio.**—Bids will be received by A. H. Stutz, City Clk., until noon, July 26, for constructing a combined storm and sanitary sewer, known as the Third, Walker and Fourth St. sewer.

Cicero, Ill.—Bids will be received by John J. Forest, Secy. Bd. Local Impts. until 8 p. m., July 25, for constructing tile pipe sewers in Drexel St., house drains in South 48th Ave., and brick pavement in South 48th Ave., between 12th and 22d Sts. George Comerford is Pres. Bd., and Charles Stoffel, Town Clk.

Rockford, Ill.—The Board of Local Improvement is considering the construction of a sanitary sewer in the First Ward, to cost $36,700.

Milwaukee, Wis.—Bids will be received by the Department of Public Works until July 22, for constructing 2,000 ft. of 12-in. pipe sewer, 2,500 ft. of 15-in. and 1,166 ft. of 30-in. brick sewer. Harry E. Briggs is Comr.

Waverly, Iowa.—Bids will soon be received for about eight blocks of sewers in various parts of the town, mostly 8-in. pipe. Ralph E. Slippy, Waterloo, Iowa, is Engr.

✚**Valley Junction, Iowa.**—We are officially advised that bids for constructing (a) sanitary sewers, and (b) an outlet and disposal plant, were received on July 13, as follows: GEO. M. KING CONSTRUCTION CO., Des Moines, Iowa (a) $15,159 (awarded contract), (b) $12,888; Cook Construction Co., Des Moines, (a) $17,676, (b) $15,519; GEO. A. MALLORY & CO., Kewanee, Ill. (a) $18,069 (b) $12,329 (awarded contract; Henning-Vineyard Co., Evansville, Ind., (a) $18,458 (b) $13,959; Des Moines Bridge & Iron Co., Des Moines, (a) $18,826 (b) $18,111; Williams & Samples Construction Co., Kansas City, (a) $19,482, (b) $13,647; Dunnegan & Briggs, Shenandoah, Iowa, (a) $22,195 (b) $13,117; J. W. Turner Improvement Co., Des Moines, (a) $22,486, (b) $16,592; M. A. Camery, Harlan, Iowa, (a) $24,886; J. L. Hallsman, Des Moines, (a) $26,000, (b) $17,000; Hoar & Parkinson, Iowa City, Iowa, (b) $13,105; N. M. Stark & Co., Des Moines, (b) $19,200. The Iowa Engineering Co., Clinton, Iowa, are Engrs.

Bemidji, Minn.—Bids will be received by the City Council until July 24, for laying 3,700 ft. of 10 to 20-in. pipe storm sewers, 7 manholes, 27 inlets, and accessories, 275 ft. of 8-in. sanitary sewer, and one manhole, and 700 ft. 8-in. and 300 ft. 4-in. water main, hydrants, valves, etc. George Stein is City Clk.

Girard, Kan.—Plans have been completed for sanitary sewers and bids will be received about Aug. 15. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

***Neligh, Neb.**—Bids will be received by O. S. Hauser, City Clk., until 1 p. m., Aug. 5, for constructing a sanitary sewer and an outlet main. The estimated cost is $10,000. Plans and specifications are on file with the City Clerk and with the consolidated Engineering Co., Engrs., Bee Bldg., Omaha, Neb. W. T. Wattles is Mayor.

California, Mo.—We are officially advised that plans and specifications are being prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, for a system of sanitary sewers at California.

Alamosa, Colo.—Bids will be received by the Board of Town Trustees until Aug. 2, for constructing a sewer in Eighth St., and an extension sewer. L. F. Edmisten is Mayor; C. B. Sampson is City Engr.

Davenport, Wash.—J. C. Ralston, Engr., Spokane, Wash., has prepared plans for a sewer system, including a septic tank and purification works. The estimated cost is $9,832.

Linnton, Ore.—Louis C. Kelsey, Selling Bldg., Portland, Ore., has been employed by the city of Linnton to prepare estimates, plans, specifications, etc., for a sanitary sewerage system.

✚**Corning, Cal.**—We are officially advised that the contract for constructing a sewer system has been awarded to the WESTERN ENGINEERING & WATER SUPPLY CO., at $20,650. Noted July 6.

✚**Dixon, Cal.**—We are officially advised that the contract for constructing a sewage and disposal plant was awarded on July 11 to BRADY & FISHER, at $23,985. The other bids were: D. W. Pierson, $27,405; Western Engineering & Water Supply Co., $28,400; Ross Construction Co., $27,313; W. S. Dunlevy, $25,400; Burns & Clark, $29,549; Williams & Belser, $24,053; Chambers & Heafey, $27,438. Reynolds & Whitman, Ochner Bldg., Sacramento, are Consult Engrs. Noted July 6.

Los Angeles, Cal.—The City Council has adopted plans for the Hollywood main sewer and bids will soon be asked for its construction. The sewer will be 12 miles long, and will serve an area of 11,600 acres. Part of the sewer will be 42-in. and from that down to 8-in. The 42-in. portion will be three miles in length, and half of this distance will be tunneled. Homer Hamlin is City Engr. and Supt. Sewerage.

San Francisco, Cal.—The Board of Public Works has received a bid of $91,500 from John Daniel, Crocker Bldg., San Francisco, for the construction of Section G of the North Point Main sewer.

***Toronto, Ont.**—Bids will be received by the Board of Control until Aug. 4, for the construction of low level interceptor, Don Syphon, crossing under the River Don, and for the manufacture and delivery of the following: 280 lin. ft. 30-in. c. i. pipe; 5,984 lin. ft. 42-in. reinforced concrete pipe; 1,985 lin. ft. 30-in. reinforced concrete pipe and 2,315 lin. ft. 36-in. reinforced concrete pipe. Plans, specifications, etc., may be obtained from the Main Drainage Works, office of City Engineer, Toronto. G. R. Geary, Mayor, is Chn. Bd. of Control.

GARBAGE DISPOSAL.

✚**Bellevue, N. J.**—AUGUSTUS SLOANE has been awarded by the city the contract for the collection of garbage for the year at $2,500.

Orange, N. J.—The contract has been awarded to the MALONEY CONTRACTING CO., it is reported, for scavenger work in the city for three years at $41,328.

Jacksonville, Fla.—A proposition, it is reported, was made to the Committee on Public Works on July 11, by E. O. Painter, in which he stated that he would erect a reduction plant to dispose of the city's garbage, provided the committee would give him a 10-year contract at $6,000 per year. Mr. Painter's plan is to build the reduction plant on his property on the south side of the river, which will necessitate the refuse being ferried across the St. Johns River on scows, the city to deliver the garbage to the plant.

Indianapolis, Ind.—The Board of Public Works has rejected all bids for the contract to remove the city's garbage. New bids will be asked. B. H. Miller is City Engr.

Yoakum, Tex.—The City Council is arranging to let the contract for the installation of a garbage crematory here to cost about $2 500.

STREETS AND ROADS.

(*Denotes that this work is advertised in Engineering News.)

Concord, N. H.—Bids will be received by H. C. Hill, State Engr., until July 21, for grading and surfacing with stone about 1½ miles of the Merrimack Valley Road, and 2½ miles of the Merrimack Valley Road.

Bellows Falls, Vt.—Bids will be received until July 22 for paving Bridge St. W. L. Mandigo is Chn. of Committee.

✚**Boston, Mass.** — Contracts were awarded by the State Highway Commission on July 12 as follows: The Pittsfield Road, 25,000 ft., macadam, to W. R. PRATT, Dalton, at $6,509. Other bidders: F. J. Mague, West Newton, $7,103; Bush, Maller & Smith, Hyannis, $7,452; J. W. Polcan, Pittsfield, $7,779. The road at North Andover, 3,100 ft., macadam, to ROWE CONSTRUCTION CO., Boston, at $15,727. Other bidders: James E. Fannon, Somerville, $13,011; William & De Furea, $14,653; R. F. Hudson, Wilmington, $16,512; E. J. Rourke, Abington, $17,919; Edward Adams, North Andover, $18,309; J. A. Gaffey, Medford, $20,491. Harold Parker is Chm. of Comm.

Boston, Mass.—Bids will be received by the Public Works Department until July 24 for constructing asphalt pavement in Tremont St., brick block pavement in Hinsdale, and tar macadam roadway in Champney St., Brighton. L. K. Rourke is Comr. of Pub. Wks.

Buffalo, N. Y.—Bids will be received by Francis G. Ward, Comr. of Streets, until 11 a. m., July 28, for paving and repaving various streets.

Freeport, N. Y.—Bids will be received by the Village President until July 21 for paving several streets with Peekskill gravel or macadam.

✚**Lancaster, N. Y.**—The contract for paving Central Ave. has been awarded by the Village Board to the NIAGARA CONSTRUCTION CO., at $17,949. The contract calls for a brick pavement and a curbing of Medina sandstone. The engineer's estimate for the work was $43,000.

Newburgh, N. Y.—Bids for paving Grand St. have been received as follows: Connecticut Hassam Paving Co., New Haven, Conn.: Hassam paving, per sq. yd., $1.85; excavations, per cu. yd., 50 cts.; concrete, per sq. yd., $4.25; concrete curb, per lin. ft., 55 cts.; reset old curb dressed down, 35 cts.; manholes, $80; catch basins, $120; inlet basins, $105.

Barber Asphalt Paving Co., 30 Church St., New York, asphalt block: asphalt paving, $2.59; excavation, 90 cts.; Portland cement concrete, $5.25; concrete curbing, 73 cts,; old curb reset, 50 cts.; manhole, $100; catch basin, $85; inlet basin, $85.

Hastings Paving Co., 25 Broad St., New York, asphalt block: asphalt paving, $2.69; excavation, $1; Portland cement concrete, $6; concrete curb, 55 cts.; old curb reset, 70 cts.; manhole, $90; catch basin, $108; inlet basin, $110.

Warren Bros. Paving Co., 59 Temple Pl., Boston, Mass., asphalt: sheet asphalt, $2.07; excavation, 50 cts.; concrete, $6.50; concrete curb, 63 cts.; reset old curt, 46 cts.; manhole, $100; catch basin, $100; inlet basin, $75.

Union Paving Co., Schenectady, N. Y., asphalt: asphalt paving, $2.87; concrete, $9.50; concrete curb, 90 cts.; old curb reset, 48 cts.; manhole, $60; catch basin, $110; inlet basin, $40.

Eastern Asphalt Paving Co., 115 Broadway, New York, sheet asphalt: paving, $2.09; excavation, 45 cts.; Portland cement concrete, $6.50; concrete curb, 60 cts.; reset old, 60 cts.; manhole, $125; catch basin, $125; inlet basin, $95.

Jersey Paving Corporation, 127 Frelinghuysen Ave., Newark, N. J.: wood block, 3-in., on sand, $2.98; 3½-in. concrete in sand, $3.17; 3-in. on concrete, $3.08; 3½ in. on concrete, $3.30; excavation, 60 cts.; concrete, $6; concrete paving, 82 cts.; old curb reset, 45 cts.; manhole, $60; catch basin, $95; inlet basin, $70

New York, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., July 26, for regulating, paving, etc., portions of various streets.

Penn Yan, N. Y.—It is estimated that the propsed improvement in paving the main street of this village will cost about $100,000. Of this amount the state will pay $25,000, the village $37,500, and the abutting property owners $37,500.

Syracuse, N. Y.—Bids will be received by F. E. Bogardus, County Supt. of Highways, until July 24, for constructing highways as follows: Jamesville-Onativia Road, 4.17 miles, cost estimated at $21,395; Oran-Cazenovia Road, 1.70 miles, $10,488; Dewitt-Cicero Road, 3.95 miles, $22,884; Niles-Owasco Road, 1.98 miles, $11,871.

✚**Greensburg, Pa.**—We are officially advised that contracts for road construction have been awarded as follows: F. J. ERBECK, Homestead, Pa., Monessen-Pricedale Road, $73,762; McCRADY BROS., Braddock, Pa., Latrobe-St. Vincent's, Philadelphia and Pittsburg Pike Road, $71,248; R. H. CUNNINGHAM & SON, Turtle Creek, Pa., Vandergraft and Chambers School House Road, $46,217. J. J. Neel is County Engr.

✚**Philadelphia, Pa.**—Press reports state that a contract for resurfacing York Road, from Olney Ave. to the county line, has been awarded to the FILBERT PAVING CO., at $30,000.

✚**Pittsburg, Pa.**—The contract for paving the Guyasuta Road with brick has been awarded to DALLAS & NARDULLI, 7915 Batavia St., Pittsburg, at $7,712.

✚**Reading, Pa.**—A contract for regulating, grading and paving several streets has ben awarded to JOHN E. WEIDNER, at $10,750.

✚**Wilkes-Barre, Pa.**—Contracts for paving have been awarded as follows: Regent St. and Newtown Cross-road, to the HERRICK CONSTRUCTION CO., at $8,416 and $22,388, respectively. St. Mary's Crossroad, to D. M. ROSSER, at $10,593.

Zelienople, Pa.—Bids will be received by the Council of the Borough of Zelienople, until 7.30 p. m., on July 25, for improving Mill St., from Clay to Division St. The approximate quanties are. 2,200 cu. yds. of grading, 3,680 lin. ft. of concrete curb and gutter and 5,570 sq. yds. brick paving. Plans and specification may be seen and bidding blanks and all necessary information may be had at the office of Douglass & McKnight, Boro. Engrs., Union Bank Bldg., Pittsburg, or the Clerk of Council, Zelienople.

Sayre, Pa.—Bids will be received by H. H. Mercereau, Boro. Clk., until Aug. 7, for about 350,000 paving blocks to be used in improving various streets.

✚**Havre de Grace, Md.**—A contract for constructing 1½ miles of asphalt macadam streets has been awarded to the HAVRE DE GRACE CONSTRUCTION CO., at $11,500.

***Washington, D. C.**—Bids will be received by the District Commissioners until 2 p. m., July 31, for grading certain streets. Cuno H. Rudolph is Chn. Comrs.

Jonesville, Va.—Bids will be received by the Board of County Supervisors until Aug. 9, for improving about 180 miles of highway. P. St. J. Wilson, Richmond, Va., is State Highway Comr.

✚**Richmond, Va.** — We are officially advised that contracts for grading 75 miles of county highway have been awarded as follows: BUNN & CO., Big Stone Gap, Va., 13.3 miles, $33,539; 13.4 miles, $51,506; 13 miles, $42,457; 11 miles, $60,302. T. TOWLES & CO., Princeton, W. Va., 15.3 miles, $51,884; 5.5 miles, $46,996. The lowest bid received for grading 6 miles was submitted by the Walton Chandler Co., at $18,240. P. St. J. Wilson is State Highway Comr. Noted June 15.

✚A contract for grading 8.25 miles of road in Wise County has been awarded to the CLARKE COUNTY CONSTRUCTION CO., Winchester, Ky., and for 33 miles to T. TOWLES & CO., Princeton, W. Va.

✚**Parkersburg, W. Va.**—We are officially advised that the contract for constructing ten miles of brick road with concrete curb and base was awarded on July 10 to the Nelson-Merydith Co., Pittsburg, Pa. C. Skidmore is County Engr. Noted June 15.

***Charlotte, N. C.**—We are officially advised that bids for paving various streets were received on July 5, as follows: (a) 58,427 sq. yds. asphalt, 2-in. top coat, 1-in. binder, 4-in. concrete; (b) 58,427 sq. yds., vitrified brick on 4-in. concrete base; (c) 58,427 sq. yds., bitulithic on 4-in. concrete base; (d) 13,630 sq. yds., binder macadam, (mixing); (e) 13,630 sq. yds., binder macadam (penetration); (f) 13,630 sq. yds., double bond; (g) 20,495 cu. yds. grading; (h) 12,340 lin. ft., concrete curbing, 18-in. deep; (i) 3,100 cu. yd., grading. West Construction Co., Chattanooga, Tenn., (a) $1.79, (b) $2.24, (c) $1.45, (g) 54 cts., (h) 33 cts., Bermudez $120,739, $124,568 with brick gutter; Atlantic Bitulithic Co., Richmond, Va., (a) $1.78, (b) $2 24, (g) 39 cts., (h) 36 cts., $117,691, $122,457 with brick gutter; West Construction Co., Chattanooga, Tenn., (a) $1.59, (b) $2.24, (g) 54 cts., (h) 33 cts., oil distillate $105,053, $114,585 with brick gutter; Union Paving Co., Schenectady, N. Y., (a) $1.89 (g) 30 cts., (h) 51 cts., Texaco $124,064; Atlantic Bitulithic Co., Richmond, Va., (b) $2.34, (c) $1.99 (g) 39 cts., (h) 36 cts., $129,961, $132,939 with brick gutter; Southern Paving & Construction Co., Knoxville, Tenn., (a) $1.64, (b) $2.25, (g) 40 cts., (h) 32 cts., Cal. Maltha D, $109,286, $114,477 with brick gutter; Southern P. & C. Co., Knoxville, Tenn., (d) $1.38, (i) 40 cts., $20,049; Porter & Boyd, Charlotte, N. C., (d) $1.30, (i) 40 cts., $18,959; Johnson, Porter & Peck, Charlotte, N. C., (e) $1.23, (i) 40 cts., $18,004; Alabama Paving Co., Birmingham, Ala., (b) $2.21, (g) 40 cts. (h) 31 cts., $141,150; Porter & Boyd, Charlotte, N. C., (e) $1.20, (i) 40 cts. $17,596; Atlantic Bit. Co., Richmond, Va., (f) $1.48, (i) 39 cts., $21 381; J. W. Hass, Charlotte, N. C., (h) 26 cts., $3,298.

Brookhaven, Miss.—Bids will be received by the County Highway Commissioners until Aug. 7 for constructing about 28 miles of road.

✚**Crowley, La.**—We are officially advised that contracts have ben awarded as follows: 300,000 sq. ft. gravel sidewalks, to DE JERSEY & ELLEFSON, Crowley, at 12.45 cts. per sq. ft.; 200,000 sq. ft. gravel crossings, to S. L. PAYNE, Eldorado, Ark., at 16.75 cts. per sq. ft. R. J. Baudreaux is City Clk. Noted June 29.

New Orleans, La.—Bids will be received by the Highway Department of the Board of State Engineers, until noon, Aug. 15, for constructing two highways. Gervais Lombard is Act. State Engr.

Akron, Ohio.—Bids will be received by the Board of Control until noon, July 21, for paving various streets, John W. Gauthier is Dir. Pub. Ser., and C. C. McCue is Clk.

✚**Canton, Ohio.**—Contracts for paving have been awarded as follows: Logan Ave. and Shorb St., to L. D. BURD, at $11,520 and $19,842, respectively; East Eighth St., to TURNBULL & SON, at $26,574; Virginia Ave., to P. CAMPBELL at $15,429.

Ashland, Ohio.—Bids will be received by Morgan Minamyer, Mayor, and the City Council, Edgar Koehl, Clk., until noon, Aug. 7, for grading, curbing and paving Orange St.

✚**Brookville, Ohio.**—The contract for paving Market St. has ben awarded to the J. E. CONLEY CO., Dayton, Ohio, at $30,000.

Canton, Ohio.—Bids will be received by the Director of Public Service until noon, July 24, for furnishing the necessary labor and materials for paving North Cherry St., from Lawrence Ave. to Hiram St., and others, and for constructing sanitary sewers in various streets. R. F. Harbert is Dir., and Warren Barr, Secy.

Chillicothe, Ohio.—Bids for paving Main and High Sts. have ben received by the Director of Public Service, as follows: Ringwald & Sons, $8,788; Jardine, Brewer & Tomlinson, $9,098. Thomas Murphy is Dir.

✚**Cincinnati, Ohio.**—The County Commissioners have awarded the contract for the improvement of Sharon Ave., from Glendale to Reading Road, to J. P. HUNLEY, at $10,349; and for improvement of Springfield Road, from Hamilton Pike to Colerain Pike, to H. E. STEELE, at $11,712. F. E. SCHROEDER was awarded the contract for repair on Indian Hill Ave. at $9,740.

Cleveland, Ohio.—Bids will be received by the Board of Commissioners of Cuyahoga County, until 11 a. m. June 28, for furnishing additional material for the repair of Shunpike Road. Plans, etc., are on file at the office of the Board, John F. Goldenbogen, Clk.

Columbus, Ohio.—Bids will be received by the Clerk of the Board of Education, Administration Bldg., Columbus, until noon, Aug. 1, for concrete and cement work, brick roadway grading, sodding, fence, etc., at the West Broad St., Heyl Ave. and Reeb Ave. school buildings, as per specifications prepared by D. Riebel, Arch., on file in the office of the Supt. of Bldgs.

Fayette, Ohio.—Bids will be received by C. D. Hause, Vil. Clk., until July 31, for paving 8,000 sq. yds. with either brick, bituminous macadam, asphalt block or carbo-via, including grading, curbing and draining.

✚**Fremont, Ohio.**—Bids for paving Lynn St. have been received as follows: MODERN CONSTRUCTION CO., crushed stone foundation, Metropolitan brick, $9,922 (awarded contract); Wassall brick, $9,873; Deckman & Duty, brick, $9,726; Medal brick, $9,726; Big Four brick, $9,751; for the same bricks with concrete foundations: $10,000, $10,951, $10,804, $10,804, $10,928. W. H. Eisenhour Metropolitan brick, crushed stone, $10,072; Deckman & Duty, $9,974; Big Four, $9,729; with concrete foundation, $12,277, $12,179, $11,934. Denman & Sandwisch, crushed stone foundation, Bessemer brick, $10,057; Deckman & Duty, $9,959; Big Four, $9,812; Metropolitan, $10,057; with concrete foundation, $10,057; $9,959; $9,812; $10,957.

Johnstown, Ohio.—Bids will be received by T. A. Duckworth, Village Clk., until noon, July 22, for paving and curbing Oregon St., from Coshocton to Park St. and Coshocton St. from the railroad to Williams St.

Marysville, Ohio.—Bids will be received by the Commissioners of Union County, until 1 p. m., Aug. 8, for constructing the Price and Mather Road and the Sanders and Osborne Road, in Jackson Township. B. J. Shelton is County Audr.

✚**New Lexington, Ohio.**—Contracts for paving the north and south ends of Main St. have been awarded to GEORGE J. BOCK & SON, Coshocton, Ohio, at $12,500.

New Philadelphia, Ohio.—Bids will be received by the County Commissioners until Aug. 7 for constructing water bound macadam road 14 ft. wide and ⅝ mile long. Estimated cost, $6,000. Edw. Stengie is County Engr.

Oakwood, Ohio.—Bids will be received by the Village Engr., 607 U. B. Bldg., Dayton, until noon, July 26, for paving South Ave., George E. Keller is Vil. Clk.

Oberlin, Ohio.—Bids will be received by H. T. Marsh, Vil. Clk., until July 24, for paving, draining and curbing about 17,000 sq. yds. of streets.

Rocky River, Ohio.—Bids will be received by W. M. Dean, Village Clk., until noon, July 21, for constructing cement walks on North Bridge Road, in accordance with the form of contract, plans and specifications on file at the office of the Clerk, and at the office of the Wm. H. Evers Engineering Co., The Arcade, Cleveland.

Steubenville, Ohio.—Bids will be received by the Auditor of Jefferson County until noon, Aug. 10, for grading, sewering and macadamizing the Wabash and Bloomfield Free Turnpike Road, about one mile. W. G. Gorsuch is Chm. Comrs.

INDIANA ROAD IMPROVEMENTS.

Bids will be received as follows for highway improvements in Indiana:

July 24.

Indianapolis, by the Board of Public Works until 10 a. m.

July 31.

Huntington, by the Commissioner of Huntington County until 10 a. m. John W. Weaver is Audr.

Aug. 4.

Winchester, by the Commissioners of Randolph County until 10 a. m. Henry F. Wood is Audr.

Aug. 7.

Marion, by the Commissioners of Grant County, until 2 p. m. A. Y. Stout is Audr.

Portland, by the Commissioner of Jay County until 10 a. m. W. Lea Smith is Audr.

Salem, by the Commissioners of Washington County until 1.30 p. m. F. S. Munkelb is Audr.

Fowler, by the Commissioners of Benton County until 1 p. m. Lemuel Shipman is Audr.

Decatur, by the Commissioners of Adams County until 10 a. m. H. S. Michaud is Audr.

Brownstone, by the Commissioners of Jackson County until 1.30 p. m. H. W. Wacker is Audr.

Newport, by the Commissioners of Vermillion County until 10 a. m. H. T. Payne is Audr.

Aug. 8.

Vincennes, by the Commissioners of Knox County until 2 p. m. John T. Scott is Audtr.

Aug. 8

Brazil, by the Commissioners of Clay County until 11.30 a. m. Edgar A. Staggs is Audr.

Bedford, by the Commissioners of Lawrence County until 1 p. m. Ezra W. Edwards is Audr.

Logansport, by the Commissioners of Cass County until 10 a. m. D. E. Wallace is Audr.

Wabash, by the Commissioners of Wabash County until 1.30 p. m. J. P. Noftzger is Audr.

Winamac, by the Commissioners of Pulaski County until noon. W. E. Munchenburg is Audr.

Aug. 9.

Lafayette, by the Commissioners of Tippecanoe County until 10 a. m. George W. Baxter is Audr.

Corydon, by the Commissioners of Harrison County until 2 p. m. William Taylor is Audr.

Logansport, by the Commissioners of Cass County until 10 a. m. William Taylor is Audr.

Noblesville, by the Commissioners of Hamilton County until 2 p. m. George Griffin is Audr.

Aug. 10

Brookville, by the Commissioners of Franklin County until 1 p. m. Charles A. Miller is Audr.

✚**Crown Point, Ind.**—The Commissioners of Lake County have awarded contracts for the construction of gravel roads as follows: The Peasron Road to AHLBORN CONSTRUCTION CO., at $19,050; the Schaaf Road to LAVENGE BROS., at $14,689, and the Black Road to DOWNEY & PORTZ, at $18,897.

✚**Logansport, Ind.**—The Commissioners of Cass County have awarded contracts for the construction of gravel roads as follows: The Foust Road to MARTIN McHALE, Logansport, at $4,390; the Kennell Road to SHAFFER & BROWNING, Royal Center, Ind., at $8,141; Galloway Road to PETER HEALEY, Logansport, at $7,200.

Charlevoix, Mich.—Bids will be received by E. J. Hiller, City Clk., until July 25, for curbing, guttering and paving Michigan and Dixon Aves., Mercer Boulevard and Chicago Ave.

St. Francisville, Ill.—We are officially advised that all bids received for constructing 18 miles of road have been rejected and new bids will be received until July 20 for constructing 3 miles, and until July 29 for 15 miles.

✚**Milwaukee, Wis.**—We are officially advised that contracts were awarded on July 7, as follows: BADGER CONSTRUCTION CO., Railway Exchange Bldg., Milwaukee, Cambridge Ave., from North to Boylston St., 4,158 sq. yds., at $1.45 per sq. yd.; Cherry St., from 17th to 24th St., 10,105 sq. yds., at $1.34½ per sq. yd.: R. F. Conway, Farwell Ave., from Park to Belleview St., 1,440 sq. yds., at $1:47 per sq. yd.; Stowell Ave., from Park to Bradford Sts., 4,700 sq. yds., at $1.45 per sq. yd.

Milwaukee, Wis.—The Department of Public Works will soon call for bids for paving Grand Ave., from Second to Fourth Sts., with bituminous material, and raising the grade of the street 14 ins.

Milwaukee, Wis.—Bids will be received by the Department of Public Works until July 21, for grading and curbing various streets in the south district, and until July 22, for constructing 39,708 sq. ft. of sidewalk and 12,471 lin. ft. curb and gutter. Harry E. Briggs is Comr.

✚**Corning, Iowa.**—A contract for paving various streets has been awarded to HAMILTON & SCHWARTZ, Shenandoah, Iowa, at $24,559.

✚**Greenfield, Iowa.**—We are officially advised that bids for paving according to the plans of the Iowa Engineering Co., Clinton, Iowa, were received on July 11, as follows: BEEBE BROS., Omaha, Neb., brick, $35,522; concrete, $22,779 (awarded contract; Land Construction Co., St. Joseph, Mo., concrete, $24,237; H. J. Cathroe, Omaha, Neb., brick $32,664, concrete $26,571; A. Kornerman & Co., Muscantine, Iowa, brick $36,224, concrete $26,581; H. C. McMaken & Son Co., Plattsmouth, Neb., brick, $29,822; Burlington Construction Co., Burlington, Iowa, brick, $30,151; M. A. Carney, Harlan, Iowa, brick, $30,612. Noted June 29.

La Porte City, Iowa.—Plans and specifications are being prepared for 6,000 sq. yds of brick block paving on concrete base. Ralph B. Slippy, Waterloo, Iowa, is Engr.

Oelwein, Iowa.—Bids will be received until 8 p. m., July 25, for constructing 42,000 sq. yds. of pavement, estimated at $80,000. John G. Schmidt is Engr.

Argenta, Ark.—We are officially advised that bids for paving Washington Ave. have ben received as follows: J. P. SHELBY, Little Rock, Ark., $34,800 (awarded contract); E. J. Wetterstrom, $35,400; General Construction Co., $38,000.

***Brownville, Tex.**—Bids will be received by the City Council until noon, Aug. 15, for 27,500 sq. yds. of paving. Benj. Kowalski is Mayor and L. B. Puente, City Clk.

✚**Dallas, Tex.**—The contract for paving Cole Ave., from Lemon to Knox St., with asphaltic macadam or a white rock foundation and Jacksboro filler, has been awarded to J. A. GREGORY, at $1.28 per sq. ft., total bid, $32,360.

Seattle, Wash.—Bids will be received by the Board of County Commissioners, Otto A. Case, Clk., until July 31, for constructing the Gehr-Erickson Road with macadam and a top course of warrenite and paving with warrenite Roads No. 1, 2 and 3.

Spokane, Wash.—Bids will be received by the City Council until 11 a. m., July 27, for the improvement of Seventh Ave., from Howard to Monroe St., by grading, curbing and paving according to the plans and specifications on file in te office of the City Engineer. C. A. Fleming is City Clk.

Los Angeles, Cal.—Bids will be received until July 24 by the County Supervisors for improving the Eagle Rock Boulevard and Citrus Ave.

Los Angeles, Cal.—The Southwest Land Co. will construct 11½ miles of cement sidewalk and curb in their new tract, Vermont Ave. Square, as soon as preliminary work is completed by Homer Hamlin, City Engr. The estimated cost is $80,000.

✚**Los Angeles, Cal.**—The County Board of Supervisors have awarded a contract to GEO. A. ROGERS, 350 Merrick St., for the improvement of a section of the county highways, 4½ miles in length, between Artesia and the Orange County line, at $22,217.

Oakland, Cal.—Bids will re received by the Board of Supervisors of Alameda County until July 24, for the construction of the Dublin-Hayward Road. The distance is 79,000 ft. and the work will consist of grading, curbing and guttering. The County Engineer has estimated the cost at $101,000.

Victoria, B. C.—Bids will be received by Allen Waters, City Engr., until July 21, for approximately 14,450 sq. yds. of paving.

✚**Ottawa, Ont.**—We are officially advised that the contract for constructing the Walker Tri-County Road has been awarded to G. A. LADD, at $7,397.

MANUFACTURING PLANTS.

(**Denotes that this work is advertised in Engineering News.*)

Boston, Mass.—Bids will be received by Metropolitan Bd. of Pk. Comrs. until July 25 for building storage house at Charles River Basin. John R. Rablin is Chief Engr.

✚**New Bedford, Mass.**—The contract for the United Shoe Machinery Co. building has been awarded to the B. F. SMITH CONSTRUCTION CO., of Providence, R. I., to be 60 × 108 ft., three stories, to cost $40,000. C. Hammond & Son, New Bedford, are the Archs.

Springfield, Mass.—A large manufacturing plant for the Gilbert & Barker Mfg. Co. will soon be begun at West Springfield. There will be eight main buildings, in addition to coal-pocket, barn and garage. Main building is to be 63 ft. × 105 ft. to serve as machine shop. Sheet-metal building to be 160 × 250 ft.; furnace building, 83 × 120 ft.; two storage buildings 30 × 90 ft., and 30 × 70 ft.; power-house to be 52 × 90 ft. Edward H. McClintock, Springfield, is the Engr.

✚**Bridgeport, Conn.**—We are officially informed that the contract has been awarded by the Artistic Bronze Co., Bridgeport, to CASEY & HURLEY, Bridgeport, for the construction of a factory building.

Bristol, Conn.—It is reported that the Bristol & Plainville Tramway Co. have planned for many improvements in its plant. Two Curtiss steam turbines will be installed to replace the four reciprocating engines now in use. New condensing apparatus also will be installed. The power plant building will be remodeled, concrete being used in the work.

Elmira, N. Y.—G. S. Mills, 1234 Ohio Bldg., Toledo, Ohio, will soon take figures on a 3-story and basement factory building for the Castle Lead Co., of Elmira, N. Y.

Frankfort, N. Y.—Ague, Rushmort & Jennison, Arcade Bldg., Utica, have completed plans and are receiving bids for a 4-story factory building, 85 × 350 ft., brick and structural iron, to be erected by the Pratt Chuck Co., Charles Pratt, Pres.

Niagara Falls, N. Y.—Maas & Walstern, Inc., with general offices at 100 William St., New York City, has leased two acres of land from the Niagara Falls Power Co. at Adams Ave. and 26th St. and will erect an extensive electro chemical plant. Chester R. Phelps, Gluck Bldg., Niagara Falls, is preparing plans.

Oneida, N. Y.—The Maxwell Steel Vault Co. is having plans prepared for a 2-story factory building, 40 × 200 ft., to be erected this summer.

✚**Tonawanda, N. Y.**—J. Spaualding & Sons Co., manufacturers of leather board, Rochester, N. Y., have just awarded to the ABERTHAW CONSTRUCTION CO., of Boston, the entire contract for the erection of a hard fibre mill at Tonawanda, N. Y. The construction will be of reinforced concrete and will include a main building 300 ft. × 265 ft., one-story high, except for 60 ft. of its length, where it is two stories; a one-story machine shop, 144 × 36 ft., a one-story acid boiling plant 72 × 36 ft., and a power house. The work is to be completed for the fall.

✚**Pittsburg, Pa.**—The contract has been awarded to CUTHBERT BROS. CO., 604 Bessemer Bldg., for the erection of a brick and steel tank shop addition at Beaver and Stanton Aves., North Side, for the American Locomotive Co. Cost about $30,000.

Baltimore, Md.—Plans have been completed by Theodore W. Pietsch, American Bldg., for the addition to the plant of the Paper Mills Co. in southwest Baltimore, at Scott, Wicomico and Stockholm Sts. Cost, about $100,000.

Hoffmanville, Md.—A mill will be erected by the Rockdale Roofing Asbestos Products Co. for the manufacture of asbestos paper mill board and roofing.

Mayodan, N. C.—The Avalon Mills will rebuild the plant burned recently The cost will be about $350,000, and the equipment will include 18,000 mule spindles, with accompanying machinery. F. H. Fries, of Winston-Salem, is Pres.

Thomasville, N. C.—Announcement was made that the Amazon Cotton Mills, of Thomasville, N. C., had decided to double that company's plant and that the contracts for both buildings and machinery had been awarded. This will involve an investment of over $100,000 and will enable the company to double its output of high grade cotton yarn.

Americus, Ga.—An acid plant will be erected here by the Interstate Agriculture Co. The cost is about $50,000.

Columbus, Ga.—The Eagle & Phoenix Mills stockholders held their annual meeting at Columbus, Ga., last week and decided upon an increase of capital stock from $750,000 to $1,000,000.

Ashville, Ala.—The Ragland Glass Works intends erecting a plant here. Harry Blackman, of Ragland, is reported to be interested.

Toledo, Ohio.—G. S. Mills, 1234 Ohio Bldg., Toledo, Ohio, is preparing plans for a plant for the American Can Co. of Toledo, Ohio. Plant to be of brick and concrete construction. Bacon & Huber, 755 Spitzer Bldg., Toledo, Ohio, have awarded the heating and ventilation contract for the Toledo Railway and Light Co., Adams and Superior Sts., to A. BENTLEY & SON, 37 N. Huron St.

Brazil, Ind.—The Brazil Trust Co. has ordered plans on which bids will be received for the erection of a fine office and banking building on corner Main and Franklin Sts. W. E. Carpenter, Pres.

Franklin, Ind.—The Sackon Co. has been incorporated to build and operate grain elevators and flour mills. Capital, $100,000. William Sackon is Pres.

Indianapolis, Ind.—Virgil A. Smith, North Olney St., and others are planning to build and equip a cooperative ice plant.

Pierceton, Ind.—The Pierceton Grain Co. has incorporated to build and equip an elevator and feed mill.

Terre Haute, Ind.—The Indiana Milling Co. is preparing to ask for bids for the reconstruction of the plant recently wrecked by fire.

South Bend, Ind.—Herring & Murphy will soon ask for bids for the erection of twelve large ice houses on the site of the buildings recently destroyed by fire.

South Bend, Ind.—The South Bend Rubber Tire Co. has ordered plans for the erection of a large 4-story factory building. Bids will be solicited soon. W. W. Becker, Pres.

Saginaw, Mich.—Cowles & Mutcheller, 5 Chase Blk., Saginaw, Mich., are taking figures on an addition to the Bottling Works of the J. Paquet Brewing Co., of Saginaw, Mich.

Cowles & Mutcheller, 5 Chase Bldg., Saginaw, Mich., will soon take figures on a 2-story and basement factory, 24

x 120 ft. for H. B. Frye, 404 South Warren St. Plant to be leased by the Modart Corset Co. Cost, $25,000.

Detroit, Mich.—R. E. Raseman, 1302 Penobscot Bldg., will receive bids soon on a 3-story and basement factory building, 60 x 300 ft. for the Cadillac Motor Co., 1343 Cass Ave. The building to be of brick structural iron construction with concrete floors. Cost, $60,000.

Spier, Rohns & Gehrke, 1325 Chamber of Commerce Bldg., are preparing plans and will soon take figures on a one-story foundry, 300 x 300, for the Michigan Smelting & Refining Co., 835 Superior St. Building to be of stock brick, structural iron construction and cement floors. Cost, $70,000.

✚**Milwaukee, Wis.**—The East Michigan Power Co., of Milwaukee, Mich., have awarded the general contract for the new transformer station, 50 ft. high, to A. SELINSS, Chase Bldg., Saginaw, Mich.

East St. Louis, Ill.—The Laclede Steel Co., of St. Louis, Mo., has purchased a site between East St. Louis and Moline, on which to construct a rolling mill to cost $300,000.

✚**Lomira, Wis.**—A brewery will be erected here by the Star Malt & Grain Co., Lomira The structure will be 50 x 101 ft., four stories high, of brick construction and cost about $60,000. The contract is held by HUTTER CONSTRUCTION CO. O. C. Yehling, Milwaukee, is Engr. and Arch. Brew house outfit, bottling machinery and cooperage are needed.

Sioux City, Iowa.—The Rock Springs Ice Co. has had plans prepared for an artificial ice factory. An ice cream factory and cold storage plant will be installed in connection with it. F. L. Wirick is Pres.

✚**Duluth, Minn.**—Contracts have been awarded by Chief Engineer Hazen to Bailey and Marsh, of Minneapolis, for the construction of a 10-stall roundhouse, machine shop and a large storehouse and office building.

Little Rock, Ark.—The plant of the Gult Compress Co. at Tenth and Beech Sts., will be rebuilt. It was recently destroyed by fire.

Beaumont, Tex.—The Producers' Turpentine Co. is arranging to operate in Texas and has established offices here. It has a capital of $100,000.

Dallas, Tex.—The Texas Machinery & Supply Co. is planning to construct a three-story concrete construction fireproof building on Collin St., from North Market to North Jefferson. The building, which is to be 60 x 200 ft. will be modern in its construction, having fire doors, steel sashes and an elevator capable of carrying heavy machinery. The bids for the new building will be opened soon, and the owners expect the structure to be completed ready for occupancy for the fall business. The cost of the building will be in the neighborhood of $70,000. Lang & Witchell are the Archs.

Jacksonville, Tex.—The Miller-Brooks Manufacturing Co. has been formed here. The incorporators are F. J. Miller, A. L. Brooks and R. C. Miller. The capital is $25,000.

Oakland, Cal.—Plans have been prepared by Humphrey Lawrence for a 2-story brick brass casting foundry on Third St., by the Standard Brass Casting Co., 665 Franklin St.

Ontario, Cal.—The Pacific Electric Heating Co. will erect a factory 60 x 100 ft. of concrete construction.

Ottawa, Ont.—Bids will be received until July 24, by R. C. Desrochers, Secy. Pub. Wks. Dept., for the construction of a tobacco curing barn at the Experimental Farm, Ottawa. Plans, Specifications from Dept.

Port Arthur, Ont.—The City Council have closed an agreement with Canadian Storage Corporation, Ltd., who will construct a large storage warehouse seven stories high and docks 800 ft. long, costing $400,000 each. J. McTeigue is City Clerk.

Edmonton, Alta.—COLLINS BROS & HAMILTON, of Edmonton, have secured contract for the 12-stall roundhouse to be erected here by the Grand Trunk Pacific Ry.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news concerning canal and Irrigation projects, etc., will be found under Water Supply—Irrigation.

***Dredging.**—Portland, Me.—Bids were received as follows on July 17 by Lt. Col. W. E. Craighill, Corps Engrs., U. S. A., Portland, for dredging in Saco River, Me.: Eastern Dredging Co., Boston, Mass., 32.4 cts.; Bay State Dredging Co., Boston, 33 cts.

***Dredging.**—Portland, Me.—Bids were received as follows by Lt. Col. W. E. Craighill, Corps Engrs., U. S. A., Portland, for dredging in Pepperell's Cove, Me.: Eastern Dredging Co., 16.4 cts.; Bay State Dredging Co., 17⅛ cts.

✚**Sea wall.**—New Bedford, Mass.—The Union St. Ry. Co. has awarded the contract to FRANK C. TAYLOR, of New Bedford for constructing a sea wall along certain portions of its property at Pope's Island. Estimated cost, about $40,000.

***Dredging.**—Newport, R. I. — Bids were received as follows on July 11 by Col. Frederick V. Abbot, Corps Engrs., U. S. A., Newport, for dredging harbors at New Bedford and Fairhaven, Mass.: (a) dredging 1,718,161 cu. yds.; (b) 70 cu. yds. of boulders; (c) totals: J. S. Packard Dredging Co., Providence, R. I., (a) 15.9 cts. per cu. yd., (b) $9 per cu. yd., (c) $273,818; Daly & Hannan Dredging Co., Ogdensburg, N. Y., (a) 15.25 cts., (b) $8, (c) $262,580; G. H. Breymann & Bros., Toledo, Ohio, (a) 11.75 cts., (b) $5, (c) $202,234; Eastern Dredging Co., Boston, Mass., (a) 16.3 cts., (b) $6, (c) $280,480; Coastwise Dredging Co., Norfolk, Va., (a) 14.6 cts., (b) $15, (c) $251,902; Charles M. Cole, Fall River, Mass., (a) 14.75 cts., (b) $10, (c) $254,129.

✚**Engine House.**—Hartford, Conn.—The contract for constructing the new fire engine house on Market St. has been awarded to F. D. KENT, Hartford, at $19,090, with extras. Noted on July 13.

Repairs to Ferryboat.—New York, N. Y.—Bids will be received by Calvin Tomkins, Comr. of Docks, until noon, July 27, for Contract No. 1,281, for furnishing all the labor and materials required for repairs to the municipal ferryboat "Brooklyn."

Alterations, Etc., to Refrigerating Plant.—New York, N. Y.—Bids will be received by M. J. Drummond, Comr., Dept. Public Charities, until 2.30 p. m., July 27, for furnishing all the labor and materials required for alterations and additions to the present refrigerating plant at the Kings County Hospital, Boro. Brooklyn.

Dredging.—New York, N. Y.—Bids will be received by Calvin Tomkins, Comr. of Docks, until noon, July 27, for Contract No. 1,238, for furnishing all the labor and materials required for dredging about 15,000 cu. yds. in the Boroughs of Manhattan, Brooklyn, Queens, the Bronx and Richmond.

Replacing Walls, Etc.—New York, N. Y.—Bids will be received by Calvin Tomkins, Comr. of Docks, until noon, July 27, for Contract No. 1,255, for furnishing all the labor and materials required for replacing the present walls and partitions of the record room at Pier "A," North River, Boro. Manhattan, with fireproof construction and installing metal filing cases therein.

Reconstructing Shelter Building.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., July 27, for reconstructing the shelter building in Franz Sigel Park, in the Boro. of The Bronx, City of New York.

Shelter and Comfort Station.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., July 27, for furnishing all the labor and materials for the erection and completion of a shelter and comfort station in Macombs Dam Park, City of New York.

Road Oil.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., July 27, for furnishing and delivering 1,000 bbls. of emulsifying road sprinkling oil at Prospect Park and the gravel pit, Ocean Parkway, near Ave. P, Boro. Brooklyn; also 20,000 gallons of asphalt road oil delivered in tank cars at nearest railroad depot.

Elevators.—New York, N. Y.—Bids were received on July 6 by the Comr. of Bridges for furnishing and installing elevators in the Municipal Building. The only bid was that of the Otis Elevator Co., 17 Battery Pl., New York, at $582,000.

***Vacuum Cleaning System.** — New York, N. Y.—Bids wil be received until 3 p. m., Aug. 16, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the installation of a vacuum cleaning system for the new U. S. post-office, at New York.

***Cold Storage Building.**—Danville, Pa.—Bids will be received by the Trustees of the State Hospital for the Insane, Danville, until noon, Aug. 10, for the erection of a cold storage building and the necessary cork insulation of the same. Bids may be made on building and insulation separately or collectively. Plans and specifications can be seen at the office of the Institution. H. B. Meredith, M. D., is Supt.

✚**Coal Pocket.**—North East, Pa.—The FORT PITT ENGINEERING CO., 2139 Oliver Bldg., Pittsburg, Pa., has been awarded the general contract by the Blaine, Mackay, Lee Co., of North East, for furnishing a retail coal pocket complete with coal-handling machinery.

Freight Elevator.—Philadelphia, Pa.—Bids will be received until July 21 by the Commanding Officer, Frankford Arsenal, Philadelphia, Pa., for furnishing and installing one direct connected electric freight elevator with runway, including the alteration of cartridge factory building necessary in connection therewith. The elevator is to have a maximum lifting capacity of 2,000 lbs., exclusive of the weight of the car, cables, etc., and have a speed of 1,000 ft. per min., with 2,000 lbs. with a maintained voltage at the motor of 220 volts, 2-phase, 60 cycles alternating current.

***Wharf.**—Washington, D. C.—The following bids were received on July 6 by the Commissioners of the District of Columbia, for the reconstruction of the sand and gravel wharf, at Water and Ninth Sts.: (a) wharf, complete, including excavation and removal of present structure; (b) for constructing sand wharf and manure loading platform, complete: Sanford & Brooks Co., Baltimore, Md., (a) $16,100 and $13,360, (b) $17,500 and $14,500; Clark & Winston Co., Washington, (a) $16,489 and $13,967, (b) $17,994 and $15,292.

✚**Hose.**—Washington, D. C.—The contract for furnishing 15,000 ft. of fire hose has been awarded by the District Commissioners to the EUREKA FIRE HOSE MFG. CO., 13 Barclay St., New York, at $1.10 per ft. Noted on June 29.

Boxes.—Washington, D. C.—Bids will be received until 2 p. m., July 21, by J. A. Holmes. Pur. Agt., Post Office Dept., Washington, for furnishing 19,150 wire-wound boxes of various dimensions.

Steel, Etc.—Washington, D. C.—Bids will be received until July 25 by the Bureau of Supplies and Accounts, Navy Dept., Washington, for furnishing at the various naval stations the following supplies: Boston, Mass., Schedule 3,758, furnishing steel work; Schedule 3,755, miscellaneous twist drills. Charleston, S. C., Schedule 3,763, 11,500 lbs. black plate steel, 72,000 lbs. steel angles. Brooklyn, N. Y., Schedule 3,755, miscellaneous steel bolts and nuts; Schedule 3,756, miscellaneous brass pipe; Schedule 3,763 miscellaneous w.-i. or steel pipe. Portsmouth, N. H., Schedule 3,756, 5,000 lbs. brass pipe. Application for proposals should designate the schedules desired by number.

Crane.—Norfolk, Va.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has rejected all bids received on June 17 for a 40-ton locomotive crane track at the navy yard, Norfolk. The work will be readvertised.

***Dam.**—Waynesville, N. C.—Bids will be received by the Southern Assembly for the erection of an earth dam and appurtenances, on the Assembly Grounds near Waynesville, until noon, Aug. 1. Specifications and general plans may be seen at office of the Chief Engineer Southern Assembly, Waynesville, and at Engineering News, New York and Chicago, where bidding sheets may be obtained. Bidders are expected to examine the site and acquaint themselves with the local conditions. J. W. Seaver, Jr., is Ch. Engr., Waynesville. This is a postponement from July 24. Noted on June 29.

✚**Dredging.**—Savannah, Ga.—The following bids were received on July 5 by Col. Dan C. Kingman, Corps Engrs., U. S. A., Savannah, for dredging refractory material in Brunswick Harbor, requiring the removal of 7,500 yds. of rock and other hard material: P. SANFORD ROSS, INC., Jersey City, N. J., $24,900 (awarded contract); George W. Parkhill, Jacksonville, Fla., $29,625.

Stone.—Savannah, Ga.—Bids were received by Col. Dan C. Kingman, Corps Engrs., U. S. A., Savannah, on July 12, as follows, for furnishing and placing stone for raising the training wall in Brunswick Harbor, Ga.: W. B. Fitzgerald, Savannah, $2.75 per ton; Ingram-Dart Lighterage Co., Brunswick, $2.74; George W. Parkhill, Jacksonville, Fla., $2.57.

***Dredging.**—Mobile, Ala.—The following bids were received on June 27 by Maj. C. A. F. Flagler, Corps Engrs., U. S. A., for dredging Mobile Harbor: (a) Section A, (b) Section B, (c) Section C, (d) Section D: Southern Dredging Co., Mobile, (b) 5.45 cts.; Coastwise Dredging Co., Norfolk, Va., (c) 5.38 cts., (d) 5.38 cts.; Home Dredging Co., Mobile, (a) 11.99 cts.; North American Dredging Co., Galveston, Texas, (a) 11.99 cts., (b) 6.99 cts., (c) 7.2 cts, (d) 7.9 cts.; Austin T. Byrne, Brooklyn, N. Y., (b) 11 cts., (c) 11 cts., (d) 11 cts.; Bowers Southern Dredging Co., Galveston, (a) 9 cts., (b) 6 cts., (c) 6 cts., (d) 6 cts.

***Dredging.**—Montgomery, Ala.—Bids were received as follows on July 6 by Lt.-Col. G. D. Fitch, Corps Engrs., U. S. A., Montgomery, for dredging at the mouth of Apalachicola River, Fla.: Home Dredging Co., Mobile, Ala., 14.6 cts.; Hillsboro Dredging Co., Tampa, Fla., 21.4 cts.

Drainage Canals.—Tallahassee, Fla.—Bids will be received until 10 a. m., Aug. 10, by the Board of Drainage Commissioners of the State of Florida, J. C. Luning, Secy., Tallahassee, for excavating three drainage canals on the east coast of Florida near Pomfano, Fulford and Larkin. The aggregate length of these canals is 16 miles; bottom width, 25 ft.; mean depth, 6 ft. The work will require the excavation of about 400,000 cu. yds. of earth and 200,000 cu. yds. of rock. Specifications are on file at the office of Engineering News, New York, and can be obtained also on application to J. O. Wright, Ch. Drainage Engr., Tallahassee.

Weather Station.—Key West, Fla.—Bids were received as follows on July 18 by the Chief of the Weather Bureau, Washington, D. C., for the construction of a building at the weather station, Key West: Hennebique Construction Co., New York, $16,900; Riley Bros., Key West, $14,479; Ferguson & Ward, Key West, $21,850.

Tugboats.—Vicksburg, Miss. — Bids for furnishing and delivering two steel hull screw tugboats will be received by Capt. J. A. Woodruff, Corps Engrs., U. S. A., Vicksburg, until noon, Aug. 15. The boats are to have the following approximate dimensions: Length on water line, 75 ft.; beam on water line, 16 ft.; draft fully coaled, 7 ft. Bids for any good tugs of approximately the above dimensions will be considered. The tugs are to be delivered at Vicksburg.

✚**Canal.**—Franklin, La.—The Franklin Drainage Commission has awarded the contract to the HUGH CONSTRUCTION CO. for digging a canal from Bayou Portage, about six or eight miles out in the marsh, back of Franklin to the foot of Willow St.

Levee.—Memphis, Tenn.—Bids were received by the St. Francis Levee Board, Randolph Bldg., Memphis, for improving levees in Crittendon County, Ark. The lowest bidder on the first section, 224,000 cu. yds., was John G. Sessions, at 19.8 cts. per cu. yd. This section will be three miles long and will begin across the river from Memphis. The lowest bidder on the second section, 137,000 cu. yds., was Lowrance Bros., at 28 cts. This work will be 2¼ miles in length. The lowest bidder on the third section, 105,000 cu. yds., was Lowrance Bros., at 21 cts. This work is 1¾ miles in length.

Earthwork.—Memphis, Tenn. — Bids for constructing about 250,000 cu. yds. of earthwork in the Lower St. Francis Levee District will be received by the Mississippi River Commission at the office of Maj. Clarke S. Smith, Corps Engr., U. S. A., Memphis, until 11 a. m. Aug. 1.

Channel Work.—Canton, Ohio.—Bids have been received as follows by the city for widening and deepening East Creek Channel: Logan D. Burd, 50 cts. per cu. yd.; Frank Downs, 60 cts.; James Cox, 60 cts.

✚***Towboats.**—Cincinnati, Ohio.—Bids were received as follows on June 23 by Maj. H. Jervey, Corps Engrs., U. S. A., Cincinnati, for constructing and delivering the steel or steel and iron hull towboats "Miami," "Guyandot," and "Scioto: (a) delivered at Cincinnati, (b) under alternative plans and specifications: M. A. Sweeney Shipyards & Foundry Co., Jeffersonville, Ind., (a) three towboats, $42,000 each; two, $42,000 each; one, $42,000; in these bids iron hulls were interpolated, the specifications calling for steel hulls under the proposal; (b) three, $45,300 each; two, $45,300 each; one, $45,500 (bids on flue type of boiler instead of Benson type); alternative b-1, for steel plating if required instead of iron, deduct $3,500 and $4,500 for steel hulls under (a). CHARLES BARNES CO., Cincinnati, (a) three boats, $42,000; (b) three boats, $43,374 (awarded contract; alternative b-2, for mall boilers if required as specified in (a) instead of Benson type, add $411. E. J. Howard, Jeffersonville, Ind., (a) $43,734 for one boat. Thomas M. Rees, Pittsburg, Pa., (a) three, $44,600; two, $44,700; one, $44,900; delivered at Pittsburg, Pa., $44,100, $44,200 and $44,400; (b) $48,200, $48,300 and $48,500; delivered at Pittsburg, $47,700, $47,800 and $48,000; alternative b-1, deduct $1,000; alternative b-2, deduct $500. Dubuque Boat & Boiler Works, Dubuque, Iowa, (a) three, $43,335 each; delivered at Dubuque, $42,735 each; (b) three $46,545; delivered at Dubuque, $45,845; alternative b-1, deduct $1,000; alternative b-2, add $400.

Breakwater.—Cleveland, Ohio.—Bids were received on June 26 as follows by Col. John Millis, Corps Engrs., U. S. A., Cleveland, for constructing breakwater and removing breakwater at Conneaut Harbor: The Great Lakes Dredge & Dock Co., Chicago, Ill., $207,000; Breakwater Co., $223,280; Great Lakes Construction Co., $285,730; Edward Gillen Dredge & Construction Co., $292,315.

Wall.—Newark, Ohio.—J. C. BREMAN, of Newark, has been awarded the contract for the construction of a concret wall along the west side of Log Pond Run, between Wallace and Ash Sts. Taylor Kussmaul is Clk.

DITCH.—Liberty, Ind.—Bids will be received until July 21 by the County Auditor for constructing a county ditch in Union Township 11,000 ft. long. W. R. Payne is County Surv., Liberty.

Ice Plant.—Newcastle, Ind.—James Loer is preparing to ask for bids for the construction and equipment of a new ice plant of large capacity.

Fire Apparatus.—South Bend, Ind.—The Board of Public Safety is considering the purchase of $50,000 worth of automobile fire-fighting apparatus.

Drainage.—Sullivan, Ind.—The Commissioners of Sullivan County have issued $25,000 of bonds for the construction of the Busseron Drainage system. Bids will be asked as soon as plans and specifications have been completed.

Monument. — Vincennes, Ind.—The Board of Commissioners of Knox County will receive bids until 10 a. m., Aug. 19, for the construction and erection of a soldiers monument. Plans and specifications may be had on application to John T. Scott, County Audr., Vincennes.

✚***Lock Masonry.**—Detroit, Mich.—The contract, it is reported, has been awarded to the GREAT LAKES DREDGE & DOCK CO., of Chicago, Ill., for the construction of lock masonry at Sault Ste. Marie, Mich., at $1,054,786. Bids were opened on June 29 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit. List of bidders noted on July 13.

✚**Dredging.**—Homer, Ill.—The contract has been awarded to SHAW & McGINNIS, of Bement, Ill., for dredging 11½ miles near here. Estimated cost, $15,000.

✚**Coal Dock.**—Milwaukee, Wis.—The contract has been awarded to the HEYL-PATTERSON CO. by the Milwaukee-Western Fuel Co. for the construction of a modern coal dock, 900 ft. long. Estimated cost, $500,000.

✚**Stone Crusher.**—Milwaukee, Wis.—The Department of Public Works has awarded the contract for furnishing a 100-ton stone crusher to the ALLIS-CHALMERS CO., of Milwaukee.

Dock.—Oconto, Wis.—Bids will be received by the Oconto Harbor Improvement Committee of the Common Council until 7.30 p. m., July 25, for constructing 300 ft. of dock on the north side of the turning basin. B. M. Mulvaney is City Clk.

Improving Channels. — Des Moines, Iowa.—Bids will be received until Aug. by the City Council for improving the channels of the Des Moines and Raccoon Rivers, requiring the excavation of new channels, constructing levee mattresses, rip-rap and a concrete retaining wall. Estimated cost, $200,000. Horace Susong is City Clk.

Drainage. — Nevada, Iowa. — The Board of Supervisors of Story County will soon ask for bids for District No. 22. The approximate quantities are: Section 1, about 93,000 cu. yds. excavation; Section 2, 28,782 ft. 8 and 36-in. tile; Section 3, 15,811 ft. of 10 and 16-in. tile; Section 4, 18,377 ft. of 8 and 24-in. tile. Estimated cost, about $72,000. John M. Wells is County Surv., Nevada.

Tile for Drain.—Webster City, Iowa. —E. M. Callendar, County Auditor, will receive bids until 4.30 p. m., July 24, for the construction of the tile portion of Drain No. 86.

✦Ditch. — Fairmount, Minn. — The County has awarded the contract to CHRIS AXELSON, of Clear Lake, Iowa, for the construction of Individual Ditch No. 10 at $55,005. The open work has been let to I. O. FLORENCE & CO., of Thompson, Iowa, at $7,970; and leveling the spoil banks to the same company at $3,000.

Ditch.—Glencoe, Minn.—F. D. Stocking, County Audr., will receive bids until 1 p. m., Aug. 1, for tha construction of Ditch No. 19.

✦Ditch.—Roseau, Minn. — The contract for the construction of County Ditch No. 9 has been awarded to KOHLER BROS., at $77,046.

✦Ditch Work.—Fremont, Neb.—Bids were opened as follows on July 11 by the County Commissioners for cleaning, deepening and widening the Fremont cut-off ditch: MATZEN BROS., Hooper, Neb., 15.8 cts. per cu. yd. (awarded contract); Schluetter Bros., Scribner, 17 cts.; W. M. Sherwood, Alexander, Minn., 16.75 cts.; F. M. Crane Co., Council Bluffs, 15.8 cts.; F. M. Crane Co. (provisional), 13.3 cts.; Pollard-Campbell Co., 18 cts.

✦Engine House.—St. Louis, Mo.—The contract has been awarded by the Board of Public Improvements to WALL BROS. for the construction of Fire Engine House No. 52, on the south side of Clayton Ave., between Forest and Central Aves., at $14,185. House will be for automobiles, one truck and one engine to be placed there.

Mail-Handling Apparatus.—St. Louis, Mo.—Bids were received as follows on July 17, by James Knox Taylor, Supervy. Arch., Treasury Dept., Washington, D. C., for furnishing mail-handling apparatus for the St. Louis postoffice: Lamson Consolidated Store Service Co., Boston, Mass., $114,975; B. F. Cummins Co., Chicago, partial bid.

Ditch and Levee.—Batesville, Ark.—The Board of Commissioners of Curia Drainage District No. 1, Independence County, Batesville, will receive bids until 11 a. m., July 25, for the construction of about six miles of ditch and levee. About 156,000 cu. yds. of earthwork and 50 acres clearing are included. Charles F. Cole, Batesville, is Engr.

Ditch.—Paragould, Ark.—Bids will be received until Aug. 1 by the Commissioners of Greene-Lawrence County Drainage District No. 1, C. E. Waddell, Paragould, Engr., for the construction of 15 miles of main ditch, with 40, 50, 65 and 80-ft. bottom, average depth 8 ft., slopes 1 to 1; also five laterals, total length 50 miles, bottom widths from 4 to 16 ft., depth from 3 to 8 ft., slopes 1 to 1; total excavation required 2,503,644 cu. yds. Estimated cost $250,429. The work includes clearing right of way, crossing railroads, etc. Three steel bridges will be required on main ditch. Noted on June 15.

***Dam.—Fort Worth, Tex.**—Bids will be received until Sept. 5 by the city for the construction of a dam containing about 300,000 cu. yds. of earthwork and 60,000 cu. yds. of masonry; also concrete pipe line about 6¼ miles long. Details on application to the Board of Engineers, City Hall, Fort Worth.

Cableways.—Boise, Idaho.—The following bids were received by the U. S. Reclamation Service, Washington, on July 11, for furnishing cableways for the Boise Project, Idaho: (a) 1,300 ft. cast-steel cableway; (b) 1,320 ft. patent lock cable: Lidgerwood Mfg. Co., Fisher Bldg., Chicago, Ill., (a) $13,620, 90 days; (b) $14,720, 120 days. Lenher Engineering Co., 149 Broadway, New York, (a) $10,339, 90 days; (b) $11,452, not stated. Lambert Hoisting Engine Co., 117 Poinier St., Newark, N. J., (a) $13,100, 85 days; (b) $14,100, 85 days.

Brick Stable.—Portland, Ore.—BINGHAM & McLELLAN have been awarded the contract for the erection of a 2-story brick stable on East Ash and East Third Sts. for the Liberty V Coal & Ice Co., at $15,000.

Pipe Line.—Bakersfield, Cal.—Parsons & Barton, Engrs., of Bakersfield, have completed plans for a pipe line to be constructed for the Guaranty Oil Co., from Maricopa to Ventura, a distance of 70 miles. F. O. Turner, Supt. of Construction, will receive bids for the work.

✦Enlarging Channel, Etc.—Los Angeles, Cal.—The Consolidated Lumber Co., Grass Bldg., Los Angeles, has awarded a contract to the STANDARD AMERICAN DREDGING CO., San Francisco, for enlarging the channel and basin at Wilmington, at 13 cts. per cu. yd. The minimum amount is 200,000 cu. yds. and may be increased. F. G. Dessery is Engr., Union Trust Bldg., Los Angeles.

Wharf. — Sacramento, Cal. — The Western Pacific Ry. Co., it is reported, is negotiating with the city for a lease on the water front for the erection of a large wharf. Estimated cost, $30,000. T. J. Wyche is Ch. Engr., San Francisco, Cal.

Ferry Slips.—San Francisco, Cal.—The Board of Harbor Commissioners is considering the construction of four new ferry slips, probably of reinforced concrete piling to prepare for the transbay traffic during the Panama-Pacific International Exposition.

Retaining Wall.—San Bernardino, Cal.—Bids will be received until July 24 by the county for the construction of a retaining wall to protect the bridge over the Santa Ana River on Orange St. T. D. Bright, Jr., is County Surv. Noted on July 6.

Canal Work.—Ottawa, Ont.—Bids will be received until 4 p. m., Aug. 4, by L. K. Jones, Secy. Dept. Railways and Canals, Ottawa, for lock-gates and valve gates, Holland River Division, Trent Canal. Plans, specifications, etc., can be seen at the office of the Chief Engineer, Ottawa.

Wireless Station.—Ottawa, Ont.—Bids will be received until noon, July 24, by G. J. Desbarats, Deputy Minister, Dept. Naval Service, Ottawa, for the erection of a wireless telegraph station at Midland, Ont.

✦Protection Work.—Ottawa, Ont.—We are officially advised that the Department of Railways and Canals, L. K. Jones, Secy., Ottawa, has awarded the contract for protection work on the Soulanges Canal to HANEY, QUINLAN & ROBERTSON, of Montreal, Que.

Groynes.—Toronto, Ont.—Bids will be received, addressed to the Chairman of the Board of Control, until noon, July 24, for the construction and placing of Groynes in Lake Ontario at the foot of the following streets: Woodbine Ave., Waverley Ave., Leuty Ave., McLean Ave. (Howard), Beech Ave. Specifications and form of proposal may be obtained on application to the Department of Railways and Bridges, City Engineer's Office, Toronto.

Cribs.—Toronto, Ont.—Bids will be received, addressed to the Chairman of the Board of Control, until noon, July 24, for the construction of cribs at the City Yard, Princess St. Specifications and forms of proposal may be obtained on application to the Department of Railways and Bridges, City Engineer's Office, Toronto.

✦Concrete Mixers.—Montreal, Que.—Bids were received on June 27 by L. N. Senecal, Secy. Bd. of Comrs., for the supply and delivery of eight concrete drum mixers, loading on each side alternately and end discharging: Two mixers, capacity, ½ cu. yd., with gasoline engines; two mixers, capacity ½ cu. yd., with electric motors; two mixers, capacity ¾ cu. yd., with gasoline engines; two mixers, capacity ¾ cu. yd., with electric motors. We are officially advised that the contract has been awarded to the FOSS & HILL MACHINERY CO., at $9,628.

Fire Station. — Westmount, Que.—Bids will be received until noon, July 27, by the City Clerk, for the erection of Upper Level Fire Station No. 2. A. Currie is City Surv.

U. S. POSSESSIONS AND CUBA.

Steel Rails.—Panama.—Bids were received as follows on July 18, by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing 1,800 tons of 70-lb. Bessemer steel rails and 1,250 tons of 90-lb. Bessemer steel rails, alternates being asked on open hearth steel rails: Bethlehem Steel Co., South Bethlehem, Pa., open hearth, $31.35 per ton; seconds, $29.78. R. C. Hoffman Co., Baltimore, for the Pennsylvania Steel Co., Bessemer, $31.90; open hearth, $32.90; seconds at $1 less. United States Steel Products Co., New York, Bessemer, $32.25; open hearth, $33.

Turbo-Generator Unit, Etc. — Panama.—Bids will be received until 10.30 a. m., Aug. 4, by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington D. C., for turbo-generator unit, road-roller, hose and creosoted cross ties. Blanks and general information relating to this circular (No. 640) may be obtained at Washington, or at the offices of the Assistant Purchasing Agents, 24 State St., New York, 614 Whitney-Central Bldg., New Orleans, La.; and 1086 North Point St., San Francisco, Cal.; also from the U. S. Engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburg, Pa.; Boston, Mass.; Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ill.; St. Louis, Mo.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Chattanooga, Tenn.; Louisville, Ky.; Mobile, Ala., and Galveston, Tex.; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.

FOREIGN.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ——, ——. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

Bridge.—Brazil.—The Ministry of War has been granted $50,000, it is reported, for the construction of a metal bridge across the S. Vicente Canal District of Santos, State of Sao Paulo.

Railway Station.—Austria-Hungary. —Plans have been prepared, it is reported, for rebuilding and extending the railway station at Böhmisch-Trübau.

Electric Tramway. — Russia. — Bids will be received, it is reported, until Aug. 14 by the City of Stavropol, Caucasus, for the construction of an electric tramway in the city.

Drilling Machines.—Argentina.—Bids will be received, it is reported, until Aug. 31, by the Division de Minas, Geologia e Hidrologia, Ministerio de Agricultura, Buenos Aires, for supplying 14 drilling machines.

Electric Tramway. — Italy. — The Tramvie Elettriche Intercomunali di Bergamo has been granted a concession for constructing and working an electric tramway from Bergamo to Albino.

Telegraph, Etc., Material—Australia. —Bids iwll be received at the office of the Deputy Postmaster-General, Sydney, until 2.30 p. m., Aug. 23, for supplying telegraph, telephone and electric light material, Schedules 88-104 inclusive.

Tramway. — Spain. — The Sociedad Tranvias del Este de Madrid has applied to the Dirección General de Obras Públicas, Madrid, for a concession to construct a tramway line in Madrid in continuation of the Atocha Sq.—Pasco de las Delicias Line, as far as the Puente de la Princesa Sq.

CONTRACT PRICES.

Road Construction.—Meridian, Miss. —Bids for constructing Pushmatapa, Tuguialena and Fifth St. roads were received on July 16, by the Good Roads Commission of Lauderdale County, W. P. Moore, Engr., as follows: (A) G. B. Hard & Co., Brooghaven, Miss.; (B) HEALY CONSTRUCTION CO., McAlester, Okla., (awarded contract); (C) A. E. Perry, Montgomery, Ala. The item bids were:

	A	B	C
84,571 cu. yds. grading	$0.26	$0.19	$0.18
11.75 miles sub-grading	160.00	100.00	75.00
20 acres clearing and grubbing	80.00	125.00	125.00
330 lin. ft. 15-in. vit. clay pipe, laid	.15	.25	.15
300 lin. ft. 18-in. vit. clay pipe, laid	.20	.25	.15
150 lin. ft. 24-in. vit. clay pipe, laid	.25	.25	.20
60 lin. ft. 36-in. vit. clay pipe, laid	.05	.25	.20
60 lin. ft. 48-in. vit. clay pipe, laid	.08	.25	.20
40 cu. yds. plain concrete	8.50	10.00	7.00
— cu. yds. reinforced concrete	11.00	10.00	9.00
69,300 ton-miles hauling	.33	.26	.40
20,790 ton-novac loading and spreading	.23	.19	.10
Totals	$53,614	$42,759	$48,832

EXAMINATIONS.

***Field Assistant.**—Trenton, N. J.—An examination will be held Aug. 7 at Trenton, N. J., for the position of Field Assistant, Department of Sewage and Water Supplies, State Board of Health. The salary is $100 per month. The examination open to citizens of the United States. Blanks received by Gardner Colby, Chief Examiner, Civil Service Comn., State House, Trenton, until noon, Aug. 2.

Architectural and Structural Steel Draftsman.—Washington, D. C. — The United States Civil Service Commission announces an examination on Aug. 9-10, to secure eligibles from which to make certification to fill three vacancies in the position of architectural and structural steel draftsman, at a maximum salary of $1,500 per annum, in the Lighthouse Service, Offices of the Inspectors of the Fourth, Fifth, and Eighth Districts, and vacancies requiring similar qualifications as they may occur. Age limit, 22 years or over on the date of examination. Address United States Civil Service Commission, Washington, D. C., for application and Examination Form 1312.

INDUSTRIAL NOTES.

Mr. B. S. Brown has moved his engineering offices to the Broad Exchange Bldg., 88 Broad St., Boston, Mass., where he will continue to specialize on reinforced concrete construction.

Mr. Harry J. Marks, M. Am. Soc. M. E., has taken an office in the West Street Bldg., New York, and will act as agent in the Metropolitan District for the American Engine Co., Bound Brook, N. J.

Mr. Jason Paige, Assoc. M. Am. Soc. C. E., lately resigned from the Inter Ocean Steel Co., is now with the Pittsburg Steel Products Co., Pittsburg, as consulting engineer. Mr. Paige will have headquarters in Chicago.

The Standard Scale & Supply Co., 136 West Broadway, New York, have rearranged their city trade department on Eclipse Low Charging Batch Mixers. Mr. C. H. Loomis, New York Manager for the Company, will give this trade his attention.

The Pacific Flush-Tank Co., S. Fischer Miller, Pres., Singer Bldg. New York, N. Y., will furnish information regarding charges for use of American and Canadian patents of Dr. Karl Imhoff, Essen, Germany, for his sewage purification tanks.

E. C. Sherwood has opened an office at 50 Church St., New York, N. Y., and will handle railway equipment making a specialty of relaying rails. Mr. Sherwod was for several years New York Manager for Hyde Bros. & Co., of Pittsburg.

The Flintkote Manufacturing Co., 86 Pearl St., Boston, Mass., on July 15 took over the roofing, waterproofing and insulating business of J. A. & W. Bird & Co. in its entirety and will continue it upon the same general lines as heretofore. The personell of the company will include R. W. Bird, C. F. Abbott and C. E. Rohr.

Edward L. Anderson and Theron C. Tayler, have formed a partnership and adopted the firm name of Anderson & Tayler, with office in the Ford Building, Detroit, Mich. A testing laboratory will be maintained in the Newberry Bldg. The work of this firm will consist of examinations, tests and reports on economy, efficiency and capacity of power and industrial plants and their accessories.

The Wagner Electric Mfg. Co., of St. Louis, Mo., announces the formation of the Wagner Mfg. Co., Ltd., of Canada. This corporation will be the exclusive Canadian licensee under the patents owned and controlled by the parent company and will have exclusive manufacturing and sales rights in Canada. Mr. Alfred Collyer, who has been Canadian Representative for many years, will be Manager of Sales of the new company. The headquarters will be unchanged in the Bell Telephone Bldg., Montreal, Que.

***Sewer.**—Fitchburg, Mass.—Bids for building Section 3 of the main intercepting sewer of the improved sewer system, were received July 11 by the Sewage Disposal Commissioners, David A. Hartwell, Ch. Engr., as follows: (A) McCARTHY & WALSH, East Boston, Mass. (awarded contract); (B) Strueli & Puckhafer, Bridgeport, Conn.; (C) Geo. W. Carr Co., Worcester, Mass.; (D) C. E. Trumbull Co., Boston, Mass.; (E) Joseph Long & Co., Leominster, Mass.; (F) Moore & Co., Boston, Mass.; (G) Little & Seretto, Leominster, Mass.; (H) Frank H. Cowin Co., Boston, Mass.; (I) Conners Bros. Co., Lowell, Mass.

MAIN INTERCEPTING SEWER, FITCHBURG, MASS.

	A.	B.	C.	D.	E.	F.	G.	H.	I.
1,250 lin. ft. excavation and refilling trench	$7.90	$5.98	$10.58	$9.00	$8.30	$12.00	$14.50	$14.50	$7.25
850 lin. ft. excavation and refilling trench	5.64	6.40	8.42	5.50	5.10	9.50	10.50	12.00	40.00
827.66 lin. ft. excavation and refilling trench	8.24	6.25	10.56	10.00	8.80	12.00	15.00	14.50	10.00
50 cu. yds. rock excavation in trench	6.00	12.00	6.00	6.00	10.00	15.00	7.00	10.00	8.00
490 sq. yds. brick masonry in invert	2.50	3.12	2.25	2.50	12.00	3.50	5.00	3.00	3.35
23 cu. yds. brick masonry in manholes	15.00	10.35	16.00	15.00	18.00	16.00	17.00	20.00	19.00
1,250 cu. yds. concrete masonry in trench	8.00	10.51	8.44	10.00	11.50	13.00	14.50	15.00	12.00
40,000 lbs. deformed steel bars	0.025	0.06	0.03	0.04	0.05	0.04	0.05	0.06	0.05
20,000 ft. B. M. lumber left in place	†	....	....	....	....	....	....	....	....
Totals	$34,441	$35,992	$40,092	$40,171	$45,162	$53,689	$62,780	$63,906	$70,817

†Unit price $15 for all bids, not included in totals.

The New York Office of the Weber Chimney Co. has been moved to 95 Liberty St. Mr. T. C. Maxfield, Eastern Manager, makes his headquarters at this office.

In recognition of years of service 27 employes who had worked for the firm of D. Saunders & Sons for more than 20 years received $35,000. The gifts came as a surprise and were in the nature of a memorial to the memory of Leslie Saunders, the late head of the firm, who was a philanthropist. Each of the Saunders employes got $1,000 except five who had worked in the Saunders shop for nearly forty years. They received something more than $2,000 apiece. This firm, it will be recalled, manufactures a well known line of pipe threading machinery.

The Sullivan Machinery Co., Peoples' Gas Bldg., Chicago, announce that Mr. A. de Gennes, who for a number of years represented the company in Paris, has retired. Mr. Hart O. Berg, 30 Rue du Champs Elysees, will have charge of the company's business in France under the direction of H. T. Walsh, Mgr. of the European branch office, 814 Salisbury House, London.

The Fulleton Fire Clay Co., New Brighton, Pa., whose plant was burned to the ground early last March, has its new buildings completed and is installing new machinery. It is expected that operations will be resumed July 17. The company, besides being large manufacturers of buff vitrified shape and faced building brick, is one of the original manufacturers of radial chimney block in this country. Special attention has been paid to this growing branch of the work in their new equipment, so that any demand can be met promptly, while the brick-producing capacity has also been increased. The new plant is of fireproof construction throughout and double the former capacity.

Announcement is made that Alonzo Pawling, President and Treasurer of the Pawling & Harnischfeger Co., Milwaukee, Wis., has disposed of his interest in the company and retired from business life. Late in the year 1884 Mr. Pawling with Mr. Henry Harnischfeger founded the Pawling & Harnischfeger Co. The new organization will have for its head Mr. Henry Harnischfeger, who will also act as Treasurer; the Vice-President is W. H. Hassenplug; 2nd Vice-President, F. P. Breck, and Secretary, S. H. Squire. There will be no changes in the policy of the company or its personnel other than those mentioned.

An Important Consolidation of makers of heating appliances has been announced. The company, the Federal Heater Co. will be located in Chicago and have an authorized capital stock of $9,200,000. The following companies will be constituent parts of the new concern: International Heater Co., Utica, N. Y.; Peck-Williamson Heating & Ventilating Co., Cincinnati, Ohio; L. J. Mueller Furnace Co., Milwaukee, Wis.; the Twentieth Century Heating & Ventilating Co., Akron, Ohio; Henry & Scheilde Co., Cleveland, Ohio; and the Quaker Manufacturing Co., Chicago, Ill. A. W. Williamson, of the Peck-Williamson Co., will be President; J. L. Mueller, Jr., and John Kerch, Vice-Presidents; D. M. Simpton, Secretary; and F. H. Moore, Treasurer.

Irrigation in Spain. The Spanish Government is seeking to develop a large area of fertile land in the province of Audalusia which is scarcely cultivated owing to the frequency of droughts. The plans prepared call for an expenditure of over $5,000,000 on this project. Work has already been begun on a long irrigation canal which will ultimately have ten branches, the aggregate length being 143 miles. The

LIST OF CONTRACTS PENDING

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
7-24*	Dam, Waynesville, N. C. (P. & S.)	6-29
7-24	Heating and vent., N. Y.	7-13
8-10	Drainage canals, Tallahassee, Fla. (S.)	7-20
8-12	Wharf, pipe line, Cuba (S.)	7-13

Light, Heat and Power Plants.

Bids close.		Noted in issue of
7-21	Cableways, Las Cruces, N. Mex.	7-20
7-24	Power plant, Port [illegible], Wash.	7-20
7-24	Electrical appar[illegible] Jaw, Sask.	6-29
7-24	Heating [illegible] York	7
7-25	Heatin[illegible] Denbigh, N. Dak.	7- 6
7-25	Dam, [illegible]gton, Va.	7-13
7-29	Electric [illegible]meters, Cleveland, Ohio	7-20
7-27	Steam boilers, New York, N. Y.	7- 6
7-31	Elec. equipment, New York.	7-20
7-31	Elec. fixtures, Cincinnati, O.	7-20
8- 1	Lamp standards, Washington, D. C.	7-20
8- 1	Electric railway, Brantford, Ont.	6-29
8- 4	Turbo-generator unit, etc., Panama (U. S. Poss.)	7-20
8-31	Generator sets, Los Angeles, Cal.	7-13
8-10	Generators, etc., Penticton, B. C.	7-20
1-30, 1912	Power generating and pumping plants, Australia (Foreign).	6-15

Bridges.

Bids close.		Noted in issue of
7-20	Bridge, Pittsburg, Pa.	7-20
7-22	Bridge, Pekin, Ill.	7-20
7-22	Bridge, Amboy, Ill.	7-13
7-22	Bridges, Ventura, Cal.	7-13
7-22	Bridges, De Witt, Ark.	7- 6
7-24	Bridge, Reno, Nev.	7-13
7-24	Bridges, Beatrice, Neb.	7-13
7-24*	Bridge, Bangor, Me.	7-13
7-24	Bridge, Harrisburg, Pa.	7-20
7-24	Bridge, King George, Va.	7-20
7-25	Bridges, Albany, N. Y.	6-22
7-25	Bridge work, Boston, Mass.	7-20
7-26	Bridge, Mishawaka, Ind.	7-20
7-26	Bridge, South Bend, Ind.	7- 6
7-26	Culvert, Cleveland, Ohio.	7-13
7-27	Bridge, Celina, Ohio.	7 20
7-28	Bridge work, Cincinnati, O.	7-13
7-29	Bridge, Pittsburg, Pa.	7-13
7-31	Bridge, Hartford, Conn.	7-20
8- 1*	Bridge, Shreveport, La.	7-13
8- 2	Bridges, Ashland, Ohio.	7-20
8- 5	Bridges, Metropolis, Ill.	7-20
8- 5	Bridge, Timewell, Ill.	7-20
8- 5*	Bridge, Massena, N. Y.	7-20
8- 5*	Bridge, Benton, Tenn.	7-20
8- 8	Bridge, Cambridge, Ohio.	7-20
8- 8	Substructure, Steubenville, Ohio	7-20
9- 1	Bridges, Siam (Foreign).	6-29
9- 6*	Bridge, Tampa, Fla.	7-13

Buildings.

Bids close.		Noted in issue of
7-21	School, Athens, Ohio.	7-13
7-21*	U. S. post-office, Alpena, Mich.	6-22
7-22	Lodge building, Carnegie, Pa.	7-17
7-24	U. S. post-office, Bristol, Conn.	6-22
7-24	City Hall, Oskaloosa, La.	7- 6
7-24	Additions, etc., to school, New York.	7-13
7-25	U. S. post-office, Schenectady, N. Y.	6-22
7-25	Domitory, Pierre, S. Dak.	7-13
7-25	Storage house, Boston, Mass. (Mfg. Pl.)	7-20
7-26	School, Mason City, Iowa.	7-13
7-27	Court house, Sidney, Neb.	6-15
7-27*	Group of buildings, Olympia, Wash.	5-11
7-27	School, Jud., N. Dak.	7- 6
7-27	Cajitol bldg., Boise, Idaho.	7- 6
7-28*	U. S. post-office, Rock Springs, Wyo.	6-22
7-29	Infirmaries and payilions, Lima, Ohio.	7- 6
7-31	U. S. post-office, Chicago Heights, Ill.	7- 6
7-31	Fire station, New York.	7-20
7-31	Addition to post-office, Kingston, Ont.	7-20
7-31	Pub. bldg., Humboldt, Sask.	7-20
8- 1	U. S. post-office, Huron, S. Dak.	6-29
8- 1	Pavilion, Wilberforce, Ohio	7-13
8- 1	School, Kingsley, Iowa.	7-13
8- 2	U. S. post-office, Great Bend, Kan.	6-29
8- 3	U. S. post-office, Princeton, Ind.	7- 6
8- 3	Station and other buildings, Ottawa, Ont.	7-20
8- 4	U. S. post-office, Sulphur Springs, Tex.	6-29
8- 7*	Memorial Institute, Richmond, Va.	7-13
8- 8	U. S. post-office, Juneau, Alaska	7-20
8-10	U. S. post-office, Lebanon, Ky.	7-20
8-14*	U. S. post-office, Richford, Vt.	7-20
8-16	U. S. post-office, Massillon, Ohio	7-20
8-17	U. S. post-office, Mineral Wells, Tex.	7-20
8-29	U. S. post-office, Wallingford, Conn.	7-20

Water-Works.

Bids close.		Noted in issue of
7-20	Filter plant, Flint, Mich.	7-20
7-20	Watermains, Biwabik, Minn.	7-20
7-20	Watermains, Bloomington, Ill.	7-20
7-22	Well, Glen Rock, Pa.	7-13
7-24	Water-works, Oak Harbor, Ohio	7-13
7-24	Water main, Yorktown, Sask.	7-13
7-24*	Pump, etc., Red Bank, N. J.	7-13
7-24	Water main, Beveridge, Minn.	7-13
7-24	Franchise, Los Angeles, Cal	6-29
7-24*	Boilers, Clarksburg, W. Va.	6-29
7-24	Valves, Burnaby, Ont.	6-29
7-24	Watermains, Montevideo, Minn.	7-20
7-25	Laying pipe, etc., Cincinnati, Ohio	7-20
7-25	Watermains, Columbia Hts., Minn.	7-20
7-25	Water main, Cleveland Ohio.	7- 6
7-25*	Reservoir, Muskogee, Okla.	7-13
7-26	Reservoir, Herrin, Ill.	7-13
7-26	Water pipe, etc., Dresden, Ont.	7-20
7-26	Water-works, Wall Lake, Minn.	7-20
7-27	Well, Shakopee, Minn.	7-20
7-27*	Boiler, Grand Rapids, Mich.	7-20
7-27	Intake pipe, Southampton, Ont.	7-20
7-29*	Sterlization plant, etc., Suffern, N. Y.	7-13
7-31	Conduit work, Lincoln, Neb.	7-20
8- 1	Fire hydrants, Coeur d' Alene, Idaho	7-20
8- 1	Water conduit, New York.	7-20
8- 1	Steel tanks, etc., Cherry, Ill.	7-13
8- 1	Water-works, Thomaston, Ga.	7-13
8- 2	Watermains, Prairie City, Iowa	7-20
8-3*	Gate-valves, etc., New York.	7-20
8- 3*	Water-wks, McKenzie, Tenn	7-20
8- 5	Irrigation system, Manteca, Cal.	7-13
8-12	Water mains, Newburg, Ohio.	7-20

Sewers.

Bids close.		Noted in issue of
7-21	Sewerage works, Boston, Mass.	7-20
7-25*	Sewers, Mukogee, Okla.	7-13
7-22	Sewers, Milwaukee, Wis.	7-20
7-24	Sewers, etc., Canton, Ohio.	7-20
7-24	Sewers, Bemidji, Minn.	7-20
7-25	Sewers, Cicero, Ill.	7-20
7-25	Sewers, Cleveland Heights, Ohio.	7-13
7-25*	Sewers, Mukogee, Oklaa.	7-13
7-26	Sewer pipe, Columbus, O.	7- 6
7-26*	Sewers, Upper Sandusky, Ohio	7-20
7-26	Sewers, New York, N. Y.	7-20
7-27	Sewage disposal plant, New Bremen, Ohio	7-20
7-29	Sewers, Lake Forest, Ill.	6-29
7-31*	Sewers, Harrisburg, Pa.	7-13
7-31	Sewers, Ada, Ohio.	7-20
8- 1	Sewage plants, Ligonier, Pa.	7-13
8-2	Sewer, Alamosa, Colo.	7-20
8- 4*	Sewers, Toronto, Ont.	7-20
8- 5*	Sewers, Neligh, Neb.	7-20
8- 7	Sewers, Huntington, W. Va.	7-20
8-10*	Sewers, Lebanon, Pa.	7-20
8-10*	Sewers, Nashville, Tenn.	6-29
8-21	Sewers, Clinton, S. C.	7-20
9-11*	Sewers, New Orleans, La.	7-13
8-12	Sewers, Newburg, Ohio.	7-20

Streets and Roads.

Bids close.		Noted in issue of
7-20	Road, St. Francisville, Ill.	7-20
7-21	Grading, etc., Concord, N. H.	7-20
7-21	Paving, Freeport, N. Y.	7-20
7-21	Paving, Akron, Ohio.	7-20
7-21	Walks, Rocky River, Ohio.	7-20
7-21	Grading, etc., Milwaukee, Wis.	7-20
7-21	Paving, Victoria, B. C.	7-20
7-21	Road, Decatur, Ind.	7- 6
7-21	Paving, etc., Jacksonville, Fla.	7-13
7-22	Gravel road, Terre Haute, Ind.	7-13
7-22	Sidewalks, etc., Milwaukee, Wis.	7-20
7-22	Paving, Johnstown, Ohio.	7-20
7-22	Paving, Bellows Falls, Vt.	7-20
7-24	Grading, etc., Minneapolis, Minn.	7-13
7-24*	Paving, Bemidji, Minn.	7-13
7-24	Roads, Indianapolis, Ind.	7-20
7-24	Paving, Boston, Mass.	7-20
7-24	Highways, Syracuse, N. Y.	7-20
7-24	Paving, etc., Canton, Ohio.	7-20
7-24	Paving, etc., Oberlin, Ohio.	7-20
7-24	Grading, etc., Oakland, Cal.	7-20
7-24	Road impvt., Los Angeles, Cal.	7-20
7-25	Paving, etc., Zelienople, Pa.	7-20
7-25	Paving, Oelwein, Iowa.	7-20
7-25	Paving, etc., Charlevoix, Mich.	7-20
7-25*	Paving, Newburgh, N. Y.	7-13
7-25	Paving, Cicero, Ill	7-20
7-26	Street improvement, Hoboken, N. J.	7-13
7-26*	Paving, etc., Key West, Fla.	7- 6
7-26	Sidewalk, Columbus, Ohio.	7- 6
7-26	Paving, Oakwood, Ohio.	7-20
7-26	Paving, etc., New York.	7-20
7-27	Paving, etc., Spokane, Wash	7-20
7-28	Paving, etc., Buffalo, N. Y.	7-20
7-28	Street improvements, Wapakonta, Ohio.	7-13
7-28	Gravel road, Rushville, Ind.	7-13
7-28	Street improvement, Danville, Ind.	7-13
7-29	Road, St. Francisville, Ill.	7-20
7-29	Road repairs, Cleveland, O.	7-20
7-30	Pavement, Welland, Ont.	7-13
7-31	Grading and macadamizing, Bowling Green, Ohio.	7-13
7-31*	Paving, etc., Woodstown, N. J.	7- 6
7-31	Grading, etc., Bowling Green, Ohio.	7- 6
7-31	Grading, Washington, D. C.	7-20
7-31	Roads, Huntington, Ind.	7-20
7-31	Paving, etc., Fayette, Ohio.	7-20
7-31	Paving, etc., Seattle, Wash.	7-20
8- 1	Highway, New Orleans, La.	7- 6
8- 1	Street paving, Lafayette, Ind.	7-13
8- 1	Walks, etc., Columbus, Ohio	7-20
8- 5	Roads, Marysville, Ohio.	6-29
8- 5	Paving, Bowerston, Ohio.	7- 6
8- 7	Gravel roads, Liberty, Ind.	7-13
8- 7	Paving, Sayre, Pa.	7-20
8- 4	Roads, Winchester, Ind.	7-20
8- 7	Roads, Marion, Ind.	7-20
8- 7	Roads, Portland, Ind.	7-20
8- 7	Roads, Salem, Ind.	7-20
8-7	Roads, Fowler, Ind.	7-20
8- 7	Roads, Decatur, Ind.	7-20
8- 7	Roads, Brownstone, Ind.	7-20
8- 7	Roads, Newport, Ind.	7-20
8- 7	Road, Brookhaven, Miss.	7-20
8- 7	Grading, etc., Ashland, Ohio.	7-20
8- 7	Road, New Philadelphia, O.	7-20
8- 8	Roads, Marysville, Ohio.	7-20
8- 8	Roads, Vincennes, Ind.	7-20
8- 8	Roads, Brazil, Ind.	7-20
8- 8	Roads, Bedford, Ind.	7-20
8- 8	Roads, Logansport, Ind.	7-20
8- 8	Roads, Wabash, Ind.	7-20
8- 8	Roads, Winamac, Ind.	7-20
8- 8	Gravel road, Vincennes, Ind.	7-13
8- 9*	Road improvement, Bridgeton, N. J.	7-13
8- 9	Highway impvt., Jonesville, Va.	7-20
8- 9	Roads, Lafayette, Ind.	7-20
8- 9	Roads, Corydon, Ind.	7-20
8- 9	Roads, Logansport, Ind.	7-20
8- 9	Roads, Noblesville, Ind.	7-20
8-10	Grading, etc., Steubenville, Ohio	7-20
8-10	Highways, New Orleans, La.	7-20
8-10	Roads, Brookville, Ind.	7-20
8-15*	Paving, Brownsville, Tex.	7-20
8-13	Street improvement, Cleveland, Ohio.	7-13

Miscellaneous.

Bids close.		Noted in issue of
7-21	Gravel, Jacksonville, Fla.	7-13
7-21*	Dredging, Boston, Mass.	7-13
7-21	Fire alarm telegraph, New York.	7-13
7-21	Freight elevator, Philadelphia, Pa.	7-20
7-21	Boxes, Washington, D. C.	7-20
7-21	Ditch, Liberty, Ind.	7-20
7-24	Steel flat cars, Panama (U. S. Poss.).	7-13
7-24	Steel pipe, Burnaby, Ont.	6-29
7-24	Tugboat, Brazil (Foreign).	6-29
7-24	Dredging, Los Angeles, Cal.	6 29
7-24	Spillway gates and caissons, Panama (U. S. Poss.)	6-15
7-24	Lumber, etc., New York.	7-13
7-24	Dredging, San Francisco, Cal.	7- 6
7-24	Cribs, Toronto, Ont.	7-20
7-24	Groynes, Toronto, Ont.	7-20
7-24	Tile for drain, Webster City, Iowa	7-20
7-24	Retaining wall, San Bernardino, Cal.	7-20
7-24	Wireless station, Ottawa, Ont.	7-20
7-25	Dock, Oconto, Wis.	7-20
7-25	Ditch and levee, Batesville, Ark.	7-20
7-25	Canal, Phoenix, Ariz.	7-20
7-25	Steel, etc., Wash., D. C.	7-20
7-25*	Channel work, Newport, R. I.	6-29
7-25*	Barge canal work, Albany, N. Y.	6-29
7-25*	Cement, Reading, Pa.	7- 6
7-26*	Steamboats, St. Louis, Mo.	6-29
7-26*	Stone, Savannah, Ga.	6-29
7-26	Fountain work, Washington, D. C.	7- 6
7-26	Dredging, Seattle, Wash.	7- 6
7-27*	Removing rock, San Francisco, Cal.	7- 6
7-27	Fire station Westmount, Que.	7-20
7-27	Road oil, New York.	7-20
7-27	Alterations, etc., to refrig. plant, New York	7-20
7-27	Repairs to ferryboat, N. Y.	7-20
7-27	Dredging, New York	7-20
7-27	Replacing walls, New York.	7-20
7-27	Reconst. shelter bldg., N. Y.	7-20
7-27	Shelter and comfort station, New York	7-20
7-27	Metal lath, etc., Atlanta, Ga.	7-13
7-28	Dredging, San Francisco, Cal.	7-13
7-28	Lumber, Memphis, Tenn.	7- 6
7-31	Dredging, cofferdam, etc., Seattle, Wash.	7-13
7-31*	Sewer ditch, Ada, Ohio.	7-13
8- 1	Steam lighters, Brazil, (Foreign.	6-29
8- 1*	Steel, etc., Detroit, Mich.	6-29
8- 1*	Steamers, Argentine. (Foreign)	6-15
8- 1	Railway, Ontario (Rys.)	6- 8
8- 1	Railway, Ottawa, Ont.	6-22
8- 1*	Drains, Elkhorn, Wis.	7- 6
8- 1*	Dam, Waynesville, N. C.	7-20
8- 1	Earthwork, Memphis, Tenn.	7-20
8- 1	Ditch, Glencoe, Minn.	7-20
8- 1	Ditch, Paragould, Ark.	7-20
8- 2	Improving channels, Des Moines, Iowa	7-20
8- 2*	Dredging, Norfolk, Va.	7-13
8- 3*	Shore revetment, Jacksonville, Fla.	7- 6
8- 4*	Stone dike, Galveston, Tex.	7- 6
8- 4	Canal work, Ottawa, Ont.	7-20
8- 5*	Levee, East St. Louis, Ill.	7- 6
8- 7	Torpedo-boat destroyers, Washington, D. C.	6- 8
8- 7*	Material for intake bridges, etc., Panama (U. S. Poss.).	7-13
8- 8	Telegraph cable, Australia (Foreign)	6-29
8-10	Harbor work, St. John, N. B	6-22
8-10*	Channel excavation, Chicago, Ill.	7-13
8-10	Drainage canals, Tallahassee, Fla.	7-20
8-10*	Cold storage bldg., Danville, Pa.	7-20
8-12	Wharf trestle, Cuba (U. S. Poss.).	7-13
8-14	Electric plant, Australia (Foreign)	6-29
8-14	Electric tramway, Russia (Foreign)	7-20
8-15	Tugboats, Vicksburg, Miss.	7-20
8-16*	Vacuum cleaning system, New York	7-20
8-19	Monument, Vincennes, Ind.	7-13
8-19	Monument, Vincennes, Ind.	7-20
8-21*	Vacuum cleaning system, Los Angeles, Cal.	7-13
8-23	Telegraph, etc., material, Australia (Foreign)	7-20
8-31	Drilling machines, Argentina (Foreign).	7-20
9- 1	Submarine boats, Wash, D. C.	6-29
9- 5*	Dam, Fort Worth, Tex.	7-20
9- 8*	Breakwater construction, Hawaii, (U. S. Poss.)	7-13

Examinations.

Examination date.		Noted in issue of
8- 1	Chemist, Wash., D. C.	6- 29
8- 2	Field Assistant, Trenton, N. J.	7-20
8- 5	Associate Statistician, Washton, D. C.	7- 6
8- 9	Aid, Washington, D. C.	7-13
8- 9	Assistant Engineer in Forest Products, Washington, D. C.	7-13
8- 9	Draftsman, Wash., D. C.	7-20
8-11	Asst. Engr. on Pitometer, etc, New York, N. Y.	7- 6

main canal will have a length of 53 miles and will be completed in six years. This work is part of a plan calling for the irrigation of an area of about 300 square miles on the left bank of the Guadalquivir River, whose waters will be utilized. For an additional supply when the river falls six reservoirs with a total capacity of 68,000,000,000 galls. of water are planned for neighboring valleys. Only one of these reservoirs is being constructed now. On the right side of the river it is planned to build five short canals, with a total length of 58 miles, which will irrigate an area of 40 square miles. The aggregate area of the watersheds from which the water for reservoir storage is to be gathered is about 6,718 square miles. The dams will be constructed of concrete and the canals will be trenches in earth.

Poor's Manual of Railroads, issued this week, states that the United States has 242,107 miles of steam railroads, on which the gross earnings in 1910 reached $2,804,580,939, an increase of 11½%; the net earnings $919,060,312, a gain of only 7¾%, and the aggregate capitalization $18,890,850,293, showing an addition for the year of $948,567,718.

The total mileage of steam railroads in the United States on December 31, 1910, was 242,107 miles, as against 238,356 miles on December 31, 1909, showing an increase of 3,751 miles or 1.57%.

The gross earnings for 1910 were $2,804,580,939, compared with $2,513,212,763, showing an increase of $291,368,176 or 11.59%, as against an increase of $106,192,953 or 4.41% in the preceding year.

The net earnings for 1910 were $919,060,312, compared with $852,153,280, showing an increase of $66,907,032 or 7.85%, as against an increase of $134,351,113 or 18.72% in the preceding year.

The capital stock was $8,380,819,190 or $34,922 per mile of road (main line), as against $8,030,680,963 or $33,974 per mile in 1909, showing an increase of the aggregate amount of $350,138,227 or 4.36%, compared with an increase of $388,767,877 or 5.09% in the previous year.

The funded debt was $9,600,634,906 or $40,004 per mile of road, as against $9,118,103,813 or $38,574 per mile in 1909, showing an increase of $482,531,093 or 5.29%, as against an increase of $329,585,768 or 3.75% in 1909.

The aggregate capitalization (stocks, bonds, equipment and other capital obligations) was $18,890,850,293, or $78,714 per mile of road, as against $17,942,282,575 or $75,905 per mile in 1909; $11,891,902,339 or $61,884 per mile in 1900; $10,020,925,215 or $61,343 per mile in 1890 and $5,402,038,257 or $58,624 per mile in 1880.

The percentage of operating expenses to gross earnings was 67.23%, as against 66.09% in 1909.

The revenue per ton mile was 0.752 cts., as against 0.757 cts. in 1909, 0.765 cts. in 1908 and 0.782 cts in 1907.

The revenue per passenger mile was 1.978 cts., as against 1.934 cts in 1909, 1.964 cts. in 1908 and 2.040 cts in 1907.

The gross earnings per mile of road amounted to $11,548 in 1910, compared with $10,565 in 1909, $10,543 in 1908 and $11,556 in 1907.

The net earnings per mile amounted to $3,784 in 1910 as against $3,582 in 1909, $3,144 in 1908 and $3,699 in 1907.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogs recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins. and 9 x 12 ins.)

Waterproofing.—Standard Asphalt & Rubber Co., 137 South La Salle St., Chicago. Paper; 5½ x 8 ins.; pp. 20; illustrated.

The waterproofing described is of the membrane type, the membrane being composed of layers of burlap embedded in an asphaltic composition. Specifications are given, and the views show the application of the work to bridge and trainshed floors, foundations and reservoirs.

THE TRADE CONTINUATION SCHOOL OF MUNICH.—By Dr. Georg Kerschensteiner. New York: The National Society for the Promotion of Industrial Education (Bulletin No. 14; July, 1911). Paper; 6 x 9 ins.; pp. 68; illustrated.

The continuation school is designed to fill in the gap between the time when a boy leaves the elementary school and the time when he begins his real life work. It developed in Germany nearly 50 years ago, when the State began to realize that the elementary schools did not impart the necessary education in the work and duties of life. Since then the growth of schools of this kind in Germany has been on a large scale, and the Munich schools have a particularly extensive reputation. This subject was brought to the attention of American engineers by Dr. Kirschensteiner in a lecture given under the auspices of the above association and of the American societies of mechanical, electrical and mining engineers. The pamphlet contains not only the lecture but also the curricula of five schools covering different lines of occupations.

For other Proposal Advertisements see pages

49, 50, 52, 53, 54, 56

of Advertisements and Construction News, page 36

SEWER.

Neligh, Nebraska.

Sealed proposals will be received by the City Clerk of the City of Neligh, Nebraska, up to 1.00 o'clock p. m. on the 5th day of August, 1911, for furnishing material and constructing complete, and furnishing material and for constructing each separately, Sanitary Sewer Outlet Main, City of Neligh, Nebraska; same to be in accordance with plans and specifications on file in the office of the City Clerk of Neligh, Nebraska, and also in the office of the Engineers, Omaha, Nebraska.

Estimated cost, $10,000.00.

Each bid shall be accompanied by a certified check in the sum of Five Hundred Dollars, conditioned that bidder will enter into proper contract and bond for the performance of said work.

Anyone desiring plans and specifications may obtain the same by application at the Engineers' Office, and a payment of Five Dollars per set.

The City reserves the right to reject any and all bids.

W. T. WATTLES, Mayor.
O. S. HAUSER, City Clerk.

The Consolidated Engineering Company, Engineers, 640 Bee Building, Oma-

REINFORCED-CONCRETE FRAME WORK.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF SOUTH PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the reinforced-concrete frame work, consisting of columns, girders, beams, floor slabs and pile caps for a building covering an area of approximately 130 feet by 220 feet, consisting of sub-basement, basement and nine stories, all as more minutely described in the plans and specifications for a Court House for Fulton County, Georgia, to be erected on the Southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Reinforced-Concrete Frame Work for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered and accompanied by a certified check for two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidder will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry out said work satisfactorily to the Architects and to the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence on the site not later than November 1, 1911, and be completed not later than April 15, 1912.

7. Payments upon this work will be made on the certificate of the Architects on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of materials and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with the full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER, Chairman.
Commissioners of Roads and Revenues, Fulton County, Georgia.
H. W. WOOD, Clerk.

PILING.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF SOUTH PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the concrete piling in the various acceptable methods to receive the piling caps, columns, etc., for a building covering an area of approximately 130' × 220', consisting of sub-basement, basement and nine stories, all as more minutely described in the plans and specifications for a court house for Fulton County, Georgia, to be erected on the southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Concrete Piling for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidders will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence on the site not later than September 1, 1911, and be completed not later than November 15, 1911.

7. Payments on this work will be made upon the certificate of the Architect on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and [illegible] of Fulton County, Georgia.

(Signed) H. [illegible] PALMER, Chairman.
Commissioners of Roads and Revenues, Fulton County, Georgia.
H. W. WOOD, Clerk.

CATSKILL AQUEDUCT.

CONTRACT 87.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, August 1, 1911, for Contract 87, for the construction of the Brooklyn conduit, a portion of the City pipe-lines of Catskill aqueduct, in the City Aqueduct department and extending from the junction of Flatbush avenue and Schermerhorn street in the Borough of Brooklyn, along Third avenue, Baltic street, Park place, Sixth avenue, Twenty-fourth street and Fifth avenue to Thirty-sixth street. The work to be done includes the furnishing and laying of about 17,200 feet of 66-inch steel pipe, a 66-inch Venturi meter, valves and other appurtenances, together with maintenance for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10.00) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
JOSEPH P. MORRISSEY, Secretary.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 6, 1911.—Sealed proposals will be received in this office until 3 o'clock P. M. on the 17th day of August, 1911, and then opened, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures) of the U. S. Post Office at Mineral Wells, Texas, in accordance with drawings and specifications, copies of which may be obtained from the Custodian of site at Mineral Wells, Texas, or at this office. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 12, 1911.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 23rd day of August, 1911, and then opened, for the alterations and repairs of the United States post office at Peekskill, N. Y., in strict accordance with drawings and specifications, copies of which may be obtained from the Custodian at Peekskill, N. Y., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

The New York Office of the Weber Chimney Co. has been moved to 95 Liberty St. Mr. T. C. Maxfield, Eastern Manager, makes his headquarters at this office.

In recognition of years of service 27 employes who had worked for the firm of D. Saunders & Sons for more than 20 years received $35,000. The gifts came as a surprise and were in the nature of a memorial to the memory of Leslie Saunders, the late head of the firm, who was a philanthropist. Each of the Saunders employes got $1,000 except five who had worked in the Saunders shop for nearly forty years. They received something more than $2,000 apiece. This firm, it will be recalled, manufactures a well known line of pipe threading machinery.

The Sullivan Machinery Co., Peoples' Gas Bldg., Chicago, announce that Mr. A. de Gennes, who for a number of years represented the company in Paris, has retired. Mr. Hart O. Berg, 30 Rue du Champs Elysees, will have charge of the company's business in France under the direction of H. T. Walsh, Mgr. of the European branch office, 814 Salisbury House, London.

The Fulliston Fire Clay Co., New Brighton, Pa., whose plant was burned to the ground early last March, has its new buildings completed and is installing new machinery. It is expected that operations will be resumed July 17. The company, besides being large manufacturers of buff vitrified shape and faced building brick, is one of the original manufacturers of radial chimney block in this country. Special attention has been paid to this growing branch of the work in their new equipment, so that any demand can be met promptly, while the brick-producing capacity has also been increased. The new plant is of fireproof construction throughout and double the former capacity.

Announcement is made that Alonzo Pawling, President and Treasurer of the Pawling & Harnischfeger Co., Milwaukee, Wis., has disposed of his interest in the company and retired from business life. Late in the year 1884 Mr. Pawling with Mr. Henry Harnischfeger founded the Pawling & Harnischfeger Co. The new organization will have for its head Mr. Henry Harnischfeger, who will also act as Treasurer; the Vice-President is W. H. Hassenplug; 2nd Vice-President, F. P. Breck, and Secretary, S. H. Squire. There will be no changes in the policy of the company or its personnel other than those mentioned.

An Important Consolidation of makers of heating appliances has been announced. The company, the Federal Heater Co. will be located in Chicago and have an authorized capital stock of $9,200,000. The following companies will be constituent parts of the new concern: International Heater Co., Utica, N. Y.; Peck-Williamson Heating & Ventilating Co., Cincinnati, Ohio; L. J. Mueller Furnace Co., Milwaukee, Wis.; the Twentieth Century Heating & Ventilating Co., Akron, Ohio; Henry & Scheilde Co., Cleveland, Ohio; and the Quaker Manufacturing Co., Chicago, Ill. A. W. Willison, of the Peck-Williamson Co., will be President; J. L. Mueller, Jr., and John Kerch, Vice-Presidents; D. M. Hampton, Secretary; and F. H. Moore, Treasurer.

Irrigation in Spain. The Spanish Government is seeking to develop a large area of fertile land in the province of Audalusia which is scarcely cultivated owing to the frequency of droughts. The plans prepared call for an expenditure of over $5,000,000 on this project. Work has already been begun on a long irrigation canal which will ultimately have ten branches, the aggregate length being 163 miles. The

LIST OF CONTRACTS PENDING

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
7-24*	Dam, Waynesville, N. C. (P. & S.)	6-29
7-24	Heating and vent., N. Y.	7-13
8-10	Drainage canals, Tallahassee, Fla. (S.)	7-20
8-12	Wharf, pipe line, Cuba (S.)	7-13

Light, Heat and Power Plants.

Bids close.		Noted in issue of
7-21	Cableways, Las Cruces, N. Mex.	7-20
7-24	Power plant, Port [illegible], Wash.	7-20
7-24	Electrical appar[illegible] Jaw, Sask.	6-29
7-24	Heating [illegible] York	7
7-25	Heatin[illegible] Denbigh, N. Dak.	7- 6
7-25	Dam, [illegible]gton, Va.	7-13
7-25	Electric [illegible]eters, Cleveland, Ohio	7-20
7-27	Steam boilers, New York, N. Y.	7- 6
7-31	Elec. equipment, New York	7-20
7-31	Elec. fixtures, Cincinnati, O.	7-20
8- 1	Lamp standards, Washington, D. C.	7-20
8- 1	Electric railway, Brantford, Ont.	6-29
8- 4	Turbo-generator unit, etc., Panama (U. S. Poss.)	7-20
8-31	Generator sets, Los Angeles, Cal.	7-13
8-10	Generators, etc., Penticton, B. C.	7-20
1-30, 1912	Power generating and pumping plants, Australia (Foreign)	6-15

Bridges.

Bids close.		Noted in issue of
7-20	Bridge, Pittsburg, Pa.	7-20
7-22	Bridge, Pekin, Ill.	7-20
7-22	Bridge, Amboy, Ill.	7-13
7-22	Bridges, Ventura, Cal.	7-13
7-22	Bridges, De Witt, Ark.	7- 6
7-24	Bridge, Reno, Nev.	7-13
7-24	Bridges, Beatrice, Neb.	7-13
7-24*	Bridge, Bangor, Me.	7-13
7-24	Bridge, Harrisburg, Pa.	7-20
7-24	Bridge, King George, Va.	7-20
7-25	Bridges, Albany, N. Y.	6-22
7-25	Bridge work, Boston, Mass.	7-20
7-26	Bridge, Mishawaka, Ind.	7-20
7-26	Bridge, South Bend, Ind.	7- 6
7-26	Culvert, Cleveland, Ohio	7-13
7-27	Bridge, Celina, Ohio	7 20
7-28	Bridge work, Cincinnati, O.	7-13
7-29	Bridge, Pittsburg, Pa.	7-13
7-31	Bridge, Hartford, Conn.	7-20
8- 1*	Bridge, Shreveport, La.	7-13
8- 2	Bridges, Ashland, Ohio	7-20
8- 5	Bridges, Metropolis, Ill.	7-20
8- 5	Bridge, Timewell, Ill.	7-20
8- 5*	Bridge, Massena, N. Y.	7-20
8- 5*	Bridge, Benton, Tenn.	7-20
8- 8	Bridge, Cambridge, Ohio	7-20
8- 8	Substructure, Steubenville, Ohio	7-20
9- 1	Bridges, Siam (Foreign)	6-29
9- 6*	Bridge, Tampa, Fla.	7-13

Buildings.

Bids close.		Noted in issue of
7-21	School, Athens, Ohio.	7-13
7-21*	U. S. post-office, Alpena, Mich.	6-22
7-22	Lodge building, Carnegie, Pa.	7-17
7-24	U. S. post-office, Bristol, Conn.	6-22
7-24	City Hall, Oskaloosa, La.	7- 6
7-24	Additions, etc., to school, New York.	7-13
7-25	U. S. post-office, Schenectady, N. Y.	6-22
7-25	Domitory, Pierre, S. Dak.	7-13
7-25	Storage house, Boston, Mass. (Mfg. Pl.)	7-20
7-26	School, Mason City, Iowa	7-13
7-27	Court house, Sidney, Neb.	6-15
7-27*	Group of buildings, Olympia, Wash.	5-11
7-27	School, Jud., N. Dak.	7- 6
7-27	Cajitol bldg., Boise, Idaho.	7- 6
7-28*	U. S. post-office, Rock Springs, Wyo.	6-22
7-29	Infirmaries and pavilions, Lima, Ohio.	7- 6
7-31	U. S. post-office, Chicago Heights, Ill.	7- 6
7-31	Fire station, New York	7-20
7-31	Addition to post-office, Kingston, Ont.	7-20
7-31	Pub. bldg., Humboldt, Sask.	7-20
8- 1	U. S. post-office, Huron, S. Dak.	6-29
8- 1	Pavilion, Wilberforce, Ohio	7-13
8- 1	School, Kingsley, Iowa	7-13
8- 2	U. S. post-office, Great Bend, Kan.	6-29
8- 3	U. S. post-office, Princeton, Ind.	7- 6
8- 3	Station and other buildings, Ottawa, Ont.	7-20
8- 4	U. S. post-office, Sulphur Springs, Tex.	6-29
8- 7*	Memorial Institute, Richmond, Va.	7-13
8- 8	U. S. post-office, Juneau, Alaska	7-20
8-10	U. S. post-office, Lebanon, Ky.	7-20
8-14*	U. S. post-office, Richford, Vt.	7-20
8-16	U. S. post-office, Massillon, Ohio	7-20
8-17	U. S. post-office, Mineral Wells, Tex.	7-20
8-29	U. S. post-office, Wallingford, Conn.	7-20

Water-Works.

Bids close.		Noted in issue of
7-20	Filter plant, Flint, Mich.	7-20
7-20	Watermains, Biwabik, Minn.	7-20
7-20	Watermains, Bloomington, Ill.	7-20
7-22	Well, Glen Rock, Pa.	7-13
7-24	Water-works, Oak Harbor, Ohio	7-13
7-24	Water main, Yorktown, Sask.	7-13
7-24*	Pump, etc., Red Bank, N. J.	7-13
7-24	Water main, Beveridge, Minn.	7-13
7-24	Franchise, Los Angeles, Cal	6-29
7-24*	Boilers, Clarksburg, W. Va.	6-29
7-24	Valves, Burnaby, Ont.	6-29
7-24	Watermains, Montevideo, Minn.	7-20
7-25	Laying pipe, etc., Cincinnati, Ohio	7-20
7-25	Watermains, Columbia Hts., Minn.	7-20
7-25	Water main, Cleveland Ohio.	7- 6
7-25*	Reservoir, Muskogee, Okla.	7-13
7-26	Reservoir, Herrin, Ill.	7-13
7-26	Water pipe, etc., Dresden, Ont.	7-20
7-26	Water-works, Wall Lake, Minn.	7-20
7-27	Well, Shakopee, Minn.	7-20
7-27*	Boiler, Grand Rapids, Mich.	7-20
7-27	Intake pipe, Southampton, Ont.	7-20
7-29*	Sterlization plant, etc., Suffern, N. Y.	7-13
7-31	Conduit work, Lincoln, Neb.	7-20
8- 1	Fire hydrants, Coeur d' Alene, Idaho	7-20
8- 1	Water conduit, New York	7-20
8- 1	Steel tanks, etc., Cherry, Ill.	7-13
8- 1	Water-works, Thomaston, Ga.	7-13
8- 2	Watermains, Prairie City, Iowa	7-20
8-3*	Gate-valves, etc., New York	7-20
8- 3*	Water-wks, McKenzie, Tenn	7-20
8- 5	Irrigation system, Manteca, Cal.	7-13
8-12	Water mains, Newburg, Ohio.	7-20

Sewers.

Bids close.		Noted in issue of
7-21	Sewerage works, Boston, Mass.	7-20
7-25*	Sewers, Mukogee, Okla.	7-13
7-22	Sewers, Milwaukee, Wis.	7-20
7-24	Sewers, etc., Canton, Ohio	7-20
7-24	Sewers, Bemidji, Minn.	7-20
7-25	Sewers, Cicero, Ill.	7-20
7-25	Sewers, Cleveland Heights, Ohio.	7-13
7-25*	Sewers, Mukogee, Oklaa.	7-13
7-26	Sewer pipe, Columbus, O.	7- 6
7-26*	Sewers, Upper Sandusky, Ohio	7-20
7-26	Sewers, New York, N. Y.	7-20
7-27	Sewage disposal plant, New Bremen, Ohio	7-20
7-29	Sewers, Lake Forest, Ill.	6-29
7-31*	Sewers, Harrisburg, Pa.	7-13
7-31	Sewers, Ada, Ohio	7-20
8- 1	Sewage plants, Ligonier, Pa.	7-13
8-2	Sewer, Alamosa, Colo.	7-20
8- 4*	Sewers, Toronto, Ont.	7-20
8- 5*	Sewers, Neligh, Neb.	7-20
8- 7	Sewers, Huntington, W. Va.	7-20
8-10*	Sewers, Lebanon, Pa.	7-20
8-10*	Sewers, Nashville, Tenn.	6-29
8-21	Sewers, Clinton, S. C.	7-20
9-11*	Sewers, New Orleans, La.	7-13
8-12	Sewers, Newburg, Ohio	7-20

Streets and Roads.

Bids close.		Noted in issue of
7-20	Road, St. Francisville, Ill.	7-20
7-21	Grading, etc., Concord, N. H.	7-20
7-21	Paving, Freeport, N. Y.	7-20
7-21	Paving, Akron, Ohio	7-20
7-21	Walks, Rocky River, Ohio.	7-20
7-21	Grading, etc., Milwaukee, Wis.	7-20
8- 1	Street paving, Lafayette, Ind.	7-13
8- 1	Walks, etc., Columbus, Ohio	7-20
8- 5	Roads, Marysville, Ohio.	6-29
8- 5	Paving, Bowerston, Ohio	7- 6
8- 7	Gravel roads, Liberty, Ind.	7-13
8- 7	Paving, Sayre, Pa.	7-20
8- 4	Roads, Winchester, Ind.	7-20
8- 7	Roads, Marion, Ind.	7-20
8- 7	Roads, Portland, Ind.	7-20
8- 7	Roads, Salem, Ind.	7-20
8-7	Roads, Fowler, Ind.	7-20
8- 7	Roads, Decatur, Ind.	7-20
8- 7	Roads, Brownstone, Ind.	7-20
8- 7	Roads, Newport, Ind.	7-20
8- 7	Road, Brookhaven, Miss.	7-20
8- 7	Grading, etc., Ashland, Ohio.	7-20
8- 7	Road, New Philadelphia, O.	7-20
8- 8	Roads, Marysville, Ohio	7-20
8- 8	Roads, Vincennes, Ind.	7-20
8- 8	Roads, Brazil, Ind.	7-20
8- 8	Roads, Bedford, Ind.	7-20
8- 8	Roads, Logansport, Ind.	7-20
8- 8	Roads, Wabash, Ind.	7-20
8- 8	Roads, Winamac, Ind.	7-20
8- 8	Gravel road, Vincennes, Ind.	7-13
8- 9*	Road improvement, Bridgeton, N. J.	7-13
8- 9	Highway impvt., Jonesville, Va.	7-20
8- 9	Roads, Lafayette, Ind.	7-20
8- 9	Roads, Corydon, Ind.	7-20
8- 9	Roads, Logansport, Ind.	7-20
8- 9	Roads, Noblesville, Ind.	7-20
8-10	Grading, etc., Steubenville, Ohio	7-20
8-10	Highways, New Orleans, La.	7-20
8-10	Roads, Brookville, Ind.	7-20
8-15*	Paving, Brownsville, Tex.	7-20
8-13	Street improvement, Cleveland, Ohio.	7-13

Miscellaneous.

Bids close.		Noted in issue of
7-21	Gravel, Jacksonville, Fla.	7-13
7-21*	Dredging, Boston, Mass.	7-13
7-21	Fire alarm telegraph, New York.	7-13
7-21	Freight elevator, Philadelphia, Pa.	7-20
7-21	Boxes, Washington, D. C.	7-20
7-21	Ditch, Liberty, Ind.	7-20
7-24	Steel flat cars, Panama (U. S. Poss.).	7-13
7-24	Steel pipe, Burnaby, Ont.	6-29
7-24	Tugboat, Brazil (Foreign)	6-29
7-24	Dredging, Los Angeles, Cal.	6 29
7-24	Spillway gates and caissons, Panama (U. S. Poss.)	6-15
7-24	Lumber, etc., New York	7-13
7-24	Dredging, San Francisco, Cal.	7- 6
7-24	Cribs, Toronto, Ont.	7- 6
8- 1	Ditch, Glenoe, Minn.	7-20
8- 1	Ditch, Paragould, Ark.	7-20
8- 2	Improving channels, Des Moines, Iowa	7-20
8- 2*	Dredging, Norfolk, Va.	7-13
8- 3*	Shore revetment, Jacksonville, Fla.	7- 6
8- 4*	Stone dike, Galveston, Tex.	7- 6
8- 4	Canal work, Ottawa, Ont.	7-20
8- 5*	Levee, East St. Louis, Ill.	7- 6
8- 7	Torpedo-boat destroyers, Washington, D. C.	6- 8
8- 7*	Material for intake bridges, etc., Panama (U. S. Poss.).	7-13
8- 8	Telegraph cable, Australia (Foreign)	6-29
8-10	Harbor work, St. John, N. B	6-22
8-10*	Channel excavation, Chicago, Ill.	7-13
8-10	Drainage canals, Tallahassee, Fla.	7-20
8-10*	Cold storage bldg., Danville, Pa.	7-20
8-12	Wharf trestle, Cuba (U. S. Poss.).	7-13
8-14	Electric plant, Australia (Foreign)	6-29
8-14	Electric tramway, Russia (Foreign)	7-20
8-15	Tugboats, Vicksburg, Miss.	7-20
8-16*	Vacuum cleaning system, New York	7-20
8-19	Monument, Vincennes, Ind.	7-13
8-19	Monument, Vincennes, Ind.	7-20
8-21*	Vacuum cleaning system, Los Angeles, Cal.	7-13
8-23	Telegraph, etc., material, Australia (Foreign)	7-20
8-31	Drilling machines, Argentina (Foreign).	7-20
9- 1	Submarine boats, Wash, D. C.	6-29
9- 5*	Dam, Fort Worth, Tex.	7-20
9- 8*	Breakwater construction, Hawaii, (U. S. Poss.)	7-13

Examinations.

Examination date.		Noted in issue of
8- 1	Chemist, Wash., D. C.	6- 29
8- 2	Field Assistant, Trenton, N. J.	7-20
8- 5	Associate Statistician, Washton, D. C.	7- 6
8- 9	Aid, Washington, D. C.	7-13
8- 9	Assistant Engineer in Forest Products, Washington, D. C.	7-13
8- 9	Draftsman, Wash., D. C.	7-20
8-11	Asst. Engr. on Pitometer, etc, New York, N. Y.	7- 6

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main canal will have a length of 53 miles and will be completed in six years. This work is part of a plan calling for the irrigation of an area of about 300 square miles on the left bank of the Guadalquivir River, whose waters will be utilized. For an additional supply when the river fails six reservoirs with a total capacity of 8,000,000,000 galls. of water are planned for neighboring valleys. Only one of these reservoirs is being constructed now. On the right side of the river it is planned to build five short canals, with a total length of 58 miles, which will irrigate an area of 40 square miles. The aggregate area of the watersheds from which the water for reservoir storage is to be gathered is about 6,718 square miles. The dams will be constructed of concrete and the canals will be trenches in earth.

Poor's Manual of Railroads, issued this week, states that the United States has 242,107 miles of steam railroads, on which the gross earnings in 1910 reached $2,804,580,939, an increase of 11½%; the net earnings $919,060,312, a gain of only 7⅞%, and the aggregate capitalization $18,890,850,293, showing an addition for the year of $948,567,718.

The total mileage of steam railroads in the United States on December 31, 1910, was 242,107 miles, as against

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TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogs recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins. and 9 x 12 ins.)

Waterproofing.—Standard Asphalt & Rubber Co., 137 South La Salle St., Chicago. Paper; 5½ × 8 ins.; pp. 20; illustrated.

The waterproofing described is of the membrane type, the membrane being composed of layers of burlap embedded in an asphaltic composition. Specifications are given, and the views show the application of the work to bridge and trainshed floors, foundations and reservoirs.

THE TRADE CONTINUATION SCHOOL OF MUNICH.—By Dr. Georg Kerschensteiner. New York: The National Society for the Promotion of Industrial Education (Bulletin No. 14; July, 1911). Paper; 6 × 9 ins.; pp. 68; illustrated.

The continuation school is designed to fill in the gap between the time when a boy leaves the elementary school and the time when he begins his real life work. It developed in Germany nearly 50 years ago, when the State began to realize that the elementary schools did not impart the necessary education in the work and duties of life. Since then the growth of schools of this kind in Germany has been on a large scale, and the Munich schools have a particularly extensive reputation. This subject was brought to the attention of American engineers by Dr. Kirschensteiner in a lecture given under the auspices of the above association and of the American societies of mechanical, electrical and mining engineers. The pamphlet contains not only the lecture but also the curricula of five schools covering different lines of occupations.

For other Proposal Advertisements see pages

49, 50, 52, 53, 54, 56

of Advertisements and Construction News, page 36

SEWER.

Neligh, Nebraska.

Sealed proposals will be received by the City Clerk of the City of Neligh, Nebraska, up to 1.00 o'clock p. m. on the 5th day of August, 1911, for furnishing material and constructing complete, and furnishing material and for constructing each separately, Sanitary Sewer Outlet Main, City of Neligh, Nebraska; same to be in accordance with plans and specifications on file in the office of the City Clerk of Neligh, Nebraska, and also in the office of the Engineers, Omaha, Nebraska.

Estimated cost, $10,000.00.

Each bid shall be accompanied by a

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clearly described in the plans and specifications for a Court House for Fulton County, Georgia, to be erected on the Southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Reinforced-Concrete Frame Work for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered and accompanied by a certified check for two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidder will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry out said work satisfactorily to the Architects and to the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence on the site not later than November 1, 1911, and be completed not later than April 15, 1912.

7. Payments upon this work will be made on the certificate of the Architects on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provide.. the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of materials and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with the full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER, Chairman.
Commissioners of Roads and Revenues, Fulton County, Georgia.
H. W. WOOD, Clerk.

PILING.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF SOUTH PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the concrete piling in the various acceptable methods to receive the piling caps, columns, etc., for a building covering an area of approximately 130' × 220', consisting of sub-basement, basement and nine stories, all as more minutely described in the plans and specifications for a court house for Fulton County, Georgia, to be erected on the southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Concrete Piling for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidders will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are required must commence on the site not later than September 1, 1911, and be completed not later than November 15, 1911.

7. Payments on this work will be made upon the certificate of the Architect on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and [illegible] of Fulton County, Georgia.

(Signed) H. [illegible] PALMER, Chairman.
Commissioners of Roads and Revenues, Fulton County, Georgia.
H. W. WOOD, Clerk.

CATSKILL AQUEDUCT.

CONTRACT 87.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, August 1, 1911, for Contract 87, for the construction of the Brooklyn conduit, a portion of the City pipe-lines of Catskill aqueduct, in the City Aqueduct department and extending from the junction of Flatbush avenue and Schermerhorn street in the Borough of Brooklyn, along Third avenue, Baltic street, Park place, Sixth avenue, Twenty-fourth street and Fifth avenue to Thirty-sixth street. The work to be done includes the furnishing and laying of about 17,200 feet of 66-inch steel pipe, a 66-inch Venturi meter, valves and other appurtenances, together with maintenance for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10.00) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
JOSEPH P. MORRISSEY, Secretary.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 6, 1911.—Sealed proposals will be received in this office until 3 o'clock P. M. on the 17th day of August, 1911, and then opened, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures) of the U. S. Post Office at Mineral Wells, Texas, in accordance with drawings and specifications, copies of which may be obtained from the Custodian of site at Mineral Wells, Texas, or at this office. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 12, 1911.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 23rd day of August, 1911, and then opened, for the alterations and repairs of the United States post office at Peekskill, N. Y., in strict accordance with drawings and specifications, copies of which may be obtained from the Custodian at Peekskill, N. Y., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

HIGHWAY BRIDGE.

Benton, Tenn.

Sealed proposals, together with competitive plans and specifications, will be received at the Court House, Benton, Tennessee, until 12 o'clock noon, August 5, 1911, for the construction of a highway bridge across the Hiawassee River at Reliance, Tennessee.

Bids are to include the furnishing, delivering, and erecting complete of a steel superstructure, concrete piers and abutments and earthen embankments.

Width of roadway to be eighteen (18) feet and steel to be designed according to Cooper's specifications for Class D Highway Bridges.

Bidders are required to visit the site and secure such profiles or surveys as they may need. Further information may be obtained from J. N. McBrayer, Reliance, Tennessee.

A bond in the sum of $20,000 will be required for the faithful performance of the contract.

The right is reserved to reject any and all bids or to accept any bid.

J. N. McBRAYER, Chairman,
CHAS. E. JOHNSON, Secy.,
Committee.

STRUCTURAL STEEL WORK.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF SOUTH PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the structural steel work, consisting of columns, girders, beams, bases, etc., for a building covering an area of approximately 130' x 220', consisting of sub-basement, basement and nine stories, all more minutely described in the plans and specifications for a Court House for Fulton County, Georgia, to be erected on the Southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Structural Steel Work for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidder will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence in the drafting department of the manufacturer not later than September 1, 1911, and the entire work must be completed not later than March 15, 1912.

7. Payments on the work will be made upon the certificate of the Architect on the last day of each and every month during the time of this contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. East proposal shall be signed with full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER,
Chairman.
Commissioners of Roads and Revenues,
Fulton County, Georgia.
H. W. WOOD, Clerk.

WATER-PROOFING.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the waterproofing in the basement and sub-basement of floors, walls, etc., for building covering an area of approximately 130' x 220', consisting of sub-basement, basement and nine stories, all as more minutely described in the plans and specifications for a Court House for Fulton County, Georgia, to be erected on the Southeast corner of South Pryor and East Hunter Streets in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids must be endorsed "Proposals for Waterproofing for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidders will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence on the site not later than March 15, 1912, and be completed not later than May 15, 1912.

7. Payments on the work will be made upon the certificate of the Architect on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with full name of the bidder, and if a firm or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER,
Chairman.
Commissioners of Roads and Revenues,
Fulton County, Georgia.
H. W. WOOD, Clerk.

PAVING.

Brownsville, Texas, July 13th, 1911.

Notice is hereby given that the City Council of Brownsville, Texas, will receive sealed bids until 12 o'clock noon, August 15th, 1911, for furnishing necessary labor and material for the construction of about 27,500 sq. yds. of street paving. Bids to be made on three classes of pavement, namely: Brick, Creosoted Wood Block and Bitulithic.

Each bid must contain full name of every person or company interested in same, and be accompanied with a certified check for the sum of One Thousand Dollars as a guarantee if the bid is accepted, a contract will be entered into and its performance promptly secured. Should any bid be rejected, the certified check will be forthwith returned to the bidder. And should any bid be accepted certified check will be returned upon the proper execution, and securing of the contract. Plans and specifications are on file with the City Clerk, also with the City Engineer of the City of Brownsville. Copies of the above will be forwarded upon receipt of Five Dollars. The right is reserved to reject any and all bids. By order of the City Council, City of Brownsville.

BENJ. KOWALSKI, Mayor.
L. B. PUENTE, City Clerk.

BRIDGE RE-LETTING.

Massena, N. Y.

Sealed bids for building a reinforced concrete bridge over Raquette River at Massena Springs will be received by the Town Board at Massena, N. Y., until one o'clock P. M. on the 5th day of August, 1911. At that time and place all bids received will be opened in public and reported.

Specifications and plans may be had from B. S. O'Neill, Massena, N. Y., after July 28, 1911.

DAM.

Fort Worth Texas.

The City of Fort Worth, Texas, will receive sealed bids until September 5th, 1911, for construction of a dam containing about 300,000 cubic yards of earth work and 60,000 cubic yards of masonry.

Also concrete pipe line about 6½ miles long.

Details on application to THE BOARD OF ENGINEERS, City Hall, Fort Worth, Texas.

OFFICE, COMMISSIONERS, D. C., Washington, July 18, 1911.—Sealed proposals will be received at this office until 2 o'clock P. M., July 31, 1911, for grading certain streets in the District of Columbia. Forms of proposal, specifications, and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. CUNO H. RUDOLPH, JOHN A. JOHNSTON, WILLIAM V. JUDSON, Commissioners, D. C.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 17, 1911.—Sealed proposals will be received in this office until 3 o'clock P. M. on the 16th day of August, 1911, and then opened, for the installation of a vacuum cleaning system for the new United States Post Office at New York, N. Y., in accordance with drawing and specification, copies of which may be had at this office or at the office of the architects, Messrs. McKim, Mead and White, 160 Fifth Ave., New York, N. Y. JAMES KNOX TAYLOR, Supervising Architect.

For Additional
PROPOSAL
Advertisements
See page 35

Situations Open
(Or Vacant)

WANTED at once, three good mechanical draftsmen, with elevating and conveying machinery and structural experience; one familiar with reinforced concrete. Address "O. B. 2," Engineering News, New York. 3-1t

WANTED—Several beam and column detailers on structural steel work for buildings; none except experienced men need apply; good pay for good men. JOHN V. B. RAPP, 507 5th Ave., New York. 3-1t

WANTED—Assistant clerk thoroughly familiar with stenography and typewriting. Address "P. B. 2," Engineering News, New York. 3-1t

WANTED—Instructor in Mechanics and Materials Testing Laboratory; graduate engineer, preferably one with experience in teaching. Address, with particulars, Box 294, State College, Penna. 3-1t

Miscellaneous Wants

CIVIL engineer, graduate, 30 years, five years' experience among New York contractors, wants branch office or agency for good line; salary and commission; now employed; references. Address "A. A. 3," Engineering News, New York. 3-1t

FULLY qualified English engineer (A. M. I. C. E.), situate in London, already acting as representative for a few good firms, is prepared to undertake English agency for one or two good specialties. Negotiations for sale or licence of British patents for successful inventions also undertaken. Address "C. A. 3," Engineering News, New York 3-3t

Second Hand Pipe

6,000-7,000 feet ex. heavy 2 inch black iron pipe; full lengths; been used for water supply; 5 cts. per foot f. o. b. Mass.

Address "B. A. 3," Engineering News, New York. 3-1t

EXAMINATIONS

Space under this heading is sold for notices of Civil Service Examinations, etc.

STATE OF NEW JERSEY.
CIVIL SERVICE EXAMINATION
TO BE HELD
AUGUST 7, 1911

for the position of FIELD ASSISTANT—DEPARTMENT OF SEWERAGE AND WATER SUPPLIES—STATE BOARD OF HEALTH, Trenton, N. J.

SALARY, $100 per month.

(Examination open to citizens of the United States.)

For particulars and application blanks, address Gardner Colby, Chief Examiner, Civil Service Commission, State House, Trenton, N. J. Blanks will be received up to noon, Wednesday, August 2nd, 1911. 3-1t

ENGINEERING NEWS
is more frequently consulted for
Technical Help
Miscellaneous Wants
Second-Hand Machinery
than any other Engineering Journal in the United States

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Bridges .....
Buildings .....
Water Supply a
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